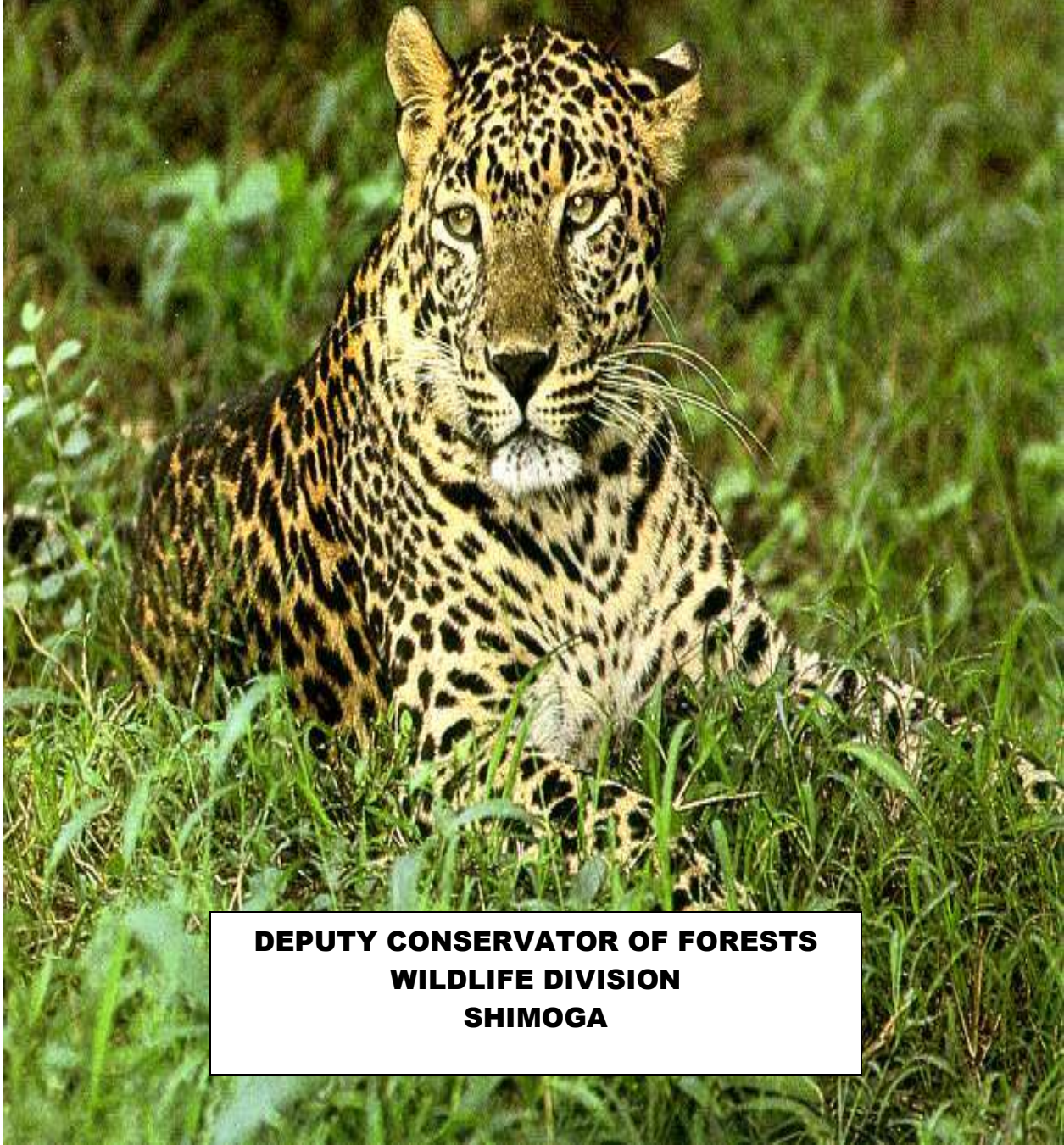


**KARNATAKA FOREST DEPARTMENT
MANAGEMENT PLAN FOR
SHETTIHALLI WILDLIFE SANCTUARY
(2005-06 to 2014-15)**



**DEPUTY CONSERVATOR OF FORESTS
WILDLIFE DIVISION
SHIMOGA**

ACKNOWLEDGEMENT

This management plan for Shettihalli Wildlife Sanctuary is prepared for the period from 2005-06 to 2014-15. At present an area of 349.60 Sq. Kms., out of a total extent of 395.60 Sq. Kms. Is under the control of wildlife division. The balance area of 46.00 Sq. Kms. Is yet to be handed over by the Territorial division of Shimoga. Dual management of the protected area should be avoided by bringing the administration of the whole sanctuary under the wildlife wing for better management of wildlife and its habitat. While preparing this management plan details of various proposals were discussed with Asst. Conservator of Forests, Wildlife sub-division, Shimoga and unit officers of Shettihalli wildlife sanctuary and were finalized as per the guidance of Sri R.M.Ray, IFS., Principal Chief Conservator of Forests, Wildlife, Sri P.Anur Reddy, IFS., Conservator of Forests and Technical Assistant to Principal Chief Conservator of Forests, (Wildlife) and Sri R.Uday Kumar, IFS., Conservator of Forests, Shimoga Circle, Shimoga.

My thanks are due to Sri T.J.Ravi Kumar, Asst. Conservator of Forests, and Unit officers of Shettihalli wildlife sanctuary for their assistance in preparation of management plan.

**G.A.N.KARKIKAR,
Deputy Conservator of Forests,
Wildlife Division, Shimoga.**

Place : Shimoga:
Date : 31.03.2005.

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PART – I

The Protected Area: The Existing situation

Chapter 1: Introduction to the area.

1.1. Name, Location, Constitution and Extent: Shettihalli wildlife sanctuary is spread over parts of three taluks of Shimoga District, viz Shimoga, Hoasanagara and Thirthahalli Taluks. The Sanctuary is 395.60 Sq. Kms in extent and is covered by dry deciduous, moist deciduous and semi evergreen forests of Sahyadri hills in the Western Ghats, and it is a magnificent piece of beautiful and valuable forest track in the Sahyadri hills of the Western Ghats. In spite of severe biotic pressure, parts of the sanctuary have been able to retain their pristine, dense and diverse vegetation. It is therefore absolutely essential to ensure that the existing resources are not only effectively conserved but appropriate steps are also initiated to further develop the resources. The sanctuary is immensely rich in flora and fauna both in variety and diversity. These forests consist of valuable tree species including Teak, Sandal, Rosewood, Honne and Nandi. They harbour wildlife like Elephant, Bison, Spotted deer, Tiger and Panther. The area is very rich in reptiles and avifauna population. The hilly area forms the catchment basin for Kumadwathi river. Clustered with small and big nalas, the area serves as an abode for many vertebrates and invertebrates. The sanctuary has innumerable herbs, shrubs, ferns and grasses some of which are yet to be surveyed and listed. The sanctuary has many tourist attraction spots like Elephant camp at Sacrebyle, Mandagadde Bird Sanctuary and Tiger and Lion Safari at Thyavarekoppa.

The sanctuary must also be put to multiple use viz educative, recreative, scientific etc., to give humanity an indirect benefit that matches the huge opportunity cost.

LOCATION: Shettihalli wildlife sanctuary is spread over parts of three taluks of Shimoga District, viz Shimoga, Hoasanagara and Thirthahalli Taluks. The sanctuary starts from the city limit of Shimoga town. It is situated between latitudes 13° 40' and 14° 5' North and between longitudes 75° 10 and 75° 35' East. The sanctuary constitutes a beautiful pocket of 395.60 Sq. Kms in the Western Gahts forests well connected by roads. The nearest Railway station is in Shimoga city and nearest Airport is in Mangalore, about 200 Kms away.

CONSTITUTION AND EXTENT:

The sanctuary was initially notified by the Govt. of Karnataka vide notification No. AFD:47, FWL:74, Dtd: 23.11.1974 and final notification vide No. AFD:47, FWL:74 Dtd: 25.01.1977. 11 Reserve forests, 14 Minor forests and 3 plantation areas were brought together to constitute the sanctuary. The details of Reserve forests and Minor forests are as under.

Sl. No.	Name of the district	Name of the Forest SF / RF	Block & Compartment No.	Extent (in Ha)
1	Shimoga	Hanagere RF	-	6755.00
2	"	Kudi RF	-	2730.00
3	"	Harohithlu RF	-	1795.00
4	"	Masaruru RF (Part)	VII 1 , 2, 3, 6, 7, 8, 9.	1060.00
5	"	Kumadhwathi RF	-	3817.00
6	"	Baruve RF (Part)	VII 12 to 14	807.00
7	"	Mugudthi RF (Part)	-	194.00
8	"	Anesara RF	-	1819.00
9	"	Puradal RF	-	2591.00
10	"	Shankar RF	-	9330.00
11	"	Sacrebyle RF	-	3886.00
12	"	Arakere MF	-	368.00
13	"	Anupinakatte MF	-	497.00
14	"	Anupinakatte pltn.	-	87.00
15	"	Basavapure MF	XIII 1	317.00
16	"	Bedankalmatti MF	XIII 2,3.	693.00
17	"	Keegadi MF	XIII 20	144.00
18	"	Talale MF	XIV 13	242.00

19	“	Kullunde MF	XIV 14	204.00
20	“	Halasavala MF	XIV 10	325.00
21	“	Kanagalakoppa MF	XIV 11	150.00
22	“	Mandagadde MF	XIV 8	223.00
23	“	Bommenahalli (Part)	XIV 15	50.00
24	“	Sacrebyle Pltn (part)	-	100.00
25	“	Mandagatta MF	-	942.00
26	“	Kittanduru MF	VIII 23	294.00
27	“	Bide MF	VIII 24	209.00
28	“	Muniyur MF	VIII 25	332.00
			TOTAL:-	39560.00

The settlement of rights and privileges under the provision of wildlife (protection act) 1972 is still pending. Pressures for release of land and regularization of unauthorized occupation continue to exist. Due to the presence of villages and settlement inside the sanctuary, there is considerable human movements inside the sanctuary. Hamlet villages and the agricultural lands are found scattered throughout the sanctuary.

Puradhal: Puradal State Forest was constituted during 1893. A working scheme was introduced during 1902 prescribing coppice with standards and 20 years rotation. Regular working plan was effected from 1st July 1917.

Anesara : Anesara State Forest was noticed during 1920. Provisional working scheme with 'Improvement Felling' came in to force in 1922. Regular working plan was introduced in 1928, which prescribed coppices with standards for Anesara working circle and 'Improvement Felling' for Sirigere working circle.

Kudi: Kudi State Forest was constituted during 1920. Provisional working scheme was introduced in 1922 with selection felling in groups. Regular working plan was introduced in 1928 with selection system with a rotation period of 20 years.

Masarur state forest: This state forest was reserved during 1891 and notified in 1895, even though recognized during 1865-66. Provisional working scheme was introduced in 1903 and a regular working plan was introduced during 1918 with prescription of selection fellings with a rotation period of 20 years.

Harohithlu state forest: Reserved during 1913 and a provisional working scheme during the same year, which prescribed selection system on 20 year rotation. A regular working plan in 1924-25 prescribed selection method on 20 year totation.

1.2. APPROACH AND ACCESS:

The sanctuary can be approached from Shimoga which is about 18 Kms from Shimoga city. Two sides of the sanctuary boundary fall on the Bangalore - Honnavar highway No. 206 up to Ayanur, on highway 230 up to Mandagadde on Shimoga - Mangalore road respectively. The roads existing inside the sanctuary are village roads and are being used for patrolling. And majority of the existing roads are connecting one settlement to the other. The existing roads inside the sanctuary are being used by the public as well as by the department.

1.3. Statement of Significance:

There are three irrigation dams within the sanctuary, namely, Haihole dam, Barehalla dam and Seegehalla dam. There are two manganese ore mines, mined by the Mysore Minerals Limited in the sanctuary, but they are not operating now.

The people living in and around the sanctuary are dependent upon the sanctuary for fuel, fodder, small timber and other forest produces required for normal living. The sanctuary being situated near Shimoga city is also prone to fire wood and other timber like Rosewood and Teak smuggling mostly in Shankar, Purudal, Kudi and Sacrebyle State Forests. People indulge in poaching of wild boar to some extent.

A number of asphalted, metalled and mud roads pass through the sanctuary. These include Sirigere – DK road, Shimoga – Mangalore road, Shimoga – Hosanagara road and Rippenpet – Konandur road. Activities of improving the existing roads., providing drinking water facilities etc., are being carried out by local elected bodies. Labour is easily available except during harvesting season. Agriculture is the main occupation of the labourers. During lean season they are mainly dependent on the job opportunities created by the wildlife department.

There are 32 enclosures inside the sanctuary. Rehabilitation of these people against their will, will be a very difficult task. Most of the wildlife activities are labour oriented which are now met by the local villagers.

The immediate need is to gain the confidence of the local people by involving them gainfully in wildlife development activities and simultaneously they can be educated regarding the very purpose of creation of the wildlife sanctuary. Their co-operation is very much needed to provide social fencing which will protect the sanctuary more effectively than to antagonize them and to carryout development works without enlisting their whole hearted co-operation. In the long run, steps may have to be taken to declare the hamlets and the cultivated lands as enclosures thereby giving them secure feeling.

An attempt to relocate the villagers away from the sanctuary may appear to be vary ideal theoretically, but from the practical point of view this may not be feasible and may even be counter productive.

The list of enclosures, and the villages included in the sanctuary are listed in the Annexure - 1c.

CHAPTER – 2

BACK GROUND INFORMATION AND ATTRIBUTES

2.1. BOUNDARIES: The Government of Karnataka vide notification No. AFD-47, FWL-74 dated: 23.11.1974 (Annexure-Ia) and final notification No. AFD-47, FWL-74 dated:

25.01.1977 (Annexure-Ib) declared the Shettihalli wildlife sanctuary with boundaries as follows.

NORTH: From Ayanur along the Southern portion of Ayanur – Hosanagara road upto Rippenpet running from East to West.

WEST: From Rippenpet along Eastern portion of Rippenpet - Thirthahalli road including Mugudthi State forest upto Konandur wich runs North to South.

SOUTH: From Konandur the boundaries of Rippenpet, Hanagaere and Thrithahalli range forest area up to Mandagadde running from West to East.

SOUTH – EAST: From Mandagadde along the western portion of Shimoga – Mangalore road up to Shimoga running from South to North East.

NORTH – EAST: Starting from Shimoga, the line runs along the western portion of Bangalore - Honnavar road up to Ayanur.

At present the boundaries defined are not demarcated completely. Some permanent features like main road demarcate the boundaries of the sanctuary area. There is need to rationalize the boundaries of the sanctuary. And survey and demarcate the boundaries. Then reissue of notification as per the fresh survey and demarcation has to be taken up on top priority.

Further, there are about 32 enclosures and 70 villages inside the sanctuary. The extent of the enclosures have to be surveyed and boundaries to be demarcated on the ground. In order to restrict them to their hamlets and agriculture field, it is urgent and important to carry out survey and demarcation of the existing cultivated lands also. Then

the boundaries of the sanctuary and enclosures will be marked using appropriate stone pillars and by digging cattle proof trench.

2.2. GEOLOGY, ROCK AND SOIL: The area is plain to undulating with a few pokets consisting of very steep and undulating terrains and hillocks. The area consists of perennial nalas and a number of small streams. The forest is rich with mostly deciduous to semi evergreen species and dense undergrowth. The highest peak is Shankaragudda with an altitude of 1031 meters.

The underlying geological formulation is of Gneissic in origin. The Ghat forests are principally of gneissic composition, interspersed occasionally by quartzite, micoschist and granite. In Shankargudda region, the rock forms a lanticular mass of laterite with ferruginous and magnifereous rocks intimately associated with bands of limestone, Dolomite, Manganese and a few quartz in South-West Gajanur bordering Sacrebyle forest Manganese ore is also found in some parts of this sanctuary. Soil is mostly, loamy towards hills, valleys, middle slopes and lower slopes.

2.3. TERRAIN: The area is plain to undulating with a few pockets consisting of very steep and undulating terrains and hillocks. These consists of perennial nalas and a number of small streams. The forest is rich with mostly deciduous to semi evergreen species and dense undergrowth. The highest peak is Shankargudda with an altitude of 1031 meters.

2.4. CLIMATE: Local aspect and elevation influence the climate. The climate is of monsoon type. It is moist and warm except from November to the end of January when it is cool and pleasant. During March, April and May the climate is hot. March is the hottest and driest month when fire occurrences are frequent. The foot hills and the plain areas are hotter than the plateau.

The intensity of rain fall is more during June to September by the regular south west monsoon. The break of the monsoon is generally attended by high velocity winds. The temperature varies from 12° C to 38 ° C depending upon the factor of elevation

2.4.1. RAIN FALL PATTERN AND DISTRIBUTION: The sanctuary receives rainfall mainly from south-west monsoon. The sanctuary is exposed to showers starting from April-May to September-October with heavy to very heavy showers in June, July and August. The erosive action of the torrential rains can be noticed in open areas, on hillocks or forest clearings near hamlets, mining areas and other clearings due to forestry activities. In areas devoid of vegetation the top soil gets washed away resulting in open blanks incapable of supporting any vegetation. The average rainfall of the area is 2000 mm., sometimes the north east monsoon is received during November.

2.4.2. TEMPERATURE: A SUMMARY OF YEAR ROUND PATTERN: The dry, wet and cold season are recognized. The cold season starts from December and lasts up to February. Later, the hot season starts from January and lasts up to May. The climate in general is humid and wet, with average minimum and maximum temperatures being about 15° C and 39° C respectively. Water supply is adequate during rainy season, but not so during summer. Small check dams to streams in the catchments may help in solving the problem.

2.4.3. HUMIDITY: A SUMMARY OF YEAR ROUND PATTERN: Air is humid at all times, especially under the semi evergreen cover. Atmospheric water vapor does not severe far, from the saturation point, at any time of the day or night. Early morning precipitation arising out of condensation of the excessive moisture on the leaf surface due to fall in temperature is quite heavy during November, December and January. Fall in the night temperature is common during the months of February, March and April.

2.4.4. WIND SPEED: A SUMMARY OF YEAR ROUND PATTERN: Wind is an important factors that determines the distribution of vegetation with in the sanctuary. There are two types winds that blow over the sanctuary are as follows.

1. The south westerly wind between June and September.
2. The north easterly wind between September and December.

2.4.5. DROUGHT AND ITS PERIODICITY: The drier months starts from October to end of May. The drought may occur during the month of March and April. There is acute shortage of drinking water to the wildlife during these months which occurs annually.

2.5. WATER SOURCES: There are many streams and nalas, well distributed through out the sanctuary. Thunga and Kumadwhathi are the main rivers flowing in the sanctuary and they are perennial. Many of their tributaries are seasonal. A number of irrigation water tanks like Gajanur, Haihole, Barehalla, Seegehalla and small water holes are spread all over the sanctuary.

Though the area receives an average rain fall of about 2000 mm annually, it is amazing to notice that all the nalas and tanks dry up as early as in February except some perennial once. About 95% of the water runoff is, due to inadequate soil and water conservation measures and owing to steep terrains. Due to steep slopes and heavy rain fall, the top soil is washed away resulting in erosion and depletion of soil fertility. Hence effective soil and water management practices are absolutely necessary. Works like Gully plugging, construction of series of check dams, construction of pickups, culverts, artificial water holes to be taken up in a phased and systematic manner. Check dams will help in reducing water forces and increasing insitu infiltration of water, there by sub soil water will be recharged and rivers and nalas will become perennial. This matter has to be given top priority.

2.6. RANGE OF WILDLIFE, STATUS, DISTRIBUTION AND HABITAT:

2.6.1 VEGETATION:

2.6.1.1. THE BIO-GEOGRAPHIC CLASSIFICATION:

Western ghat forests are celebrated for their diversity. Millions of years of evolutionary pressures, shaped these ecosystems in to the most complex in the world.

There is an intricate web of life, which is the essence of forests themselves. Very few habitations on earth contain such profusion or weight of plant life per hectare; hidden by vegetation from all but a trained eye are a multitude of plants and animals, rare, strange and beautiful.

The biotic factors and edifice variations have played a dominant role in determining the nature of the forests growing in the sanctuary. The eastern portion of the sanctuary comprises dry deciduous forests and it gradually changes to moist deciduous type as we go towards the west. The following types of forests are mainly found in the sanctuary.

2.6.1.2 THE FOREST TYPES, COVER, AND FOOD FOR WILD ANIMALS:

A. The Southern tropical dry deciduous type (5A/C2): This type of forests is seen in Puradal, Anesara, Sacrebyle, Shankargudda, Kudi and part of Hanagere State Forest.

The top canopy consists of *Terminalia tomentosa*, *Terminalia bellerica*, *Gmelina arborea*, *Tectona grandis*, *Anogeissus latifolia*, *Lagerstroemia lanceolata* etc.

The second canopy consists of *Wrightia tinctoria*, *Zizyphus zuzuba*, *Santalum album*, *Shorea talura*, *Cassia fistula*, *Embllica officinalis*, *Randia domatorum* and Bamboos etc.

The ground floor consists of grassy patches here and there. *Eupatorium* has come up in many open patches.

B. Southern tropical moist deciduous type (3B/C2): This type of forests are seen on the western side of the sanctuary i.e., part of Hanagere State Forest, Kumadwathi State Forest, Mugudthi State forest etc. *Bambusa aurundanasea*, and *Dendrocalamus-strictus*, occur through out the area. The important species of trees occurring are *Terminalia-tomentosa*, *Tectona-grandis*, *Lagerstroemia-laneolata*, *Adina-cordifolia*, *Dalbergia-latifolia*, *Xylia-xylocarpa*, *Grewia-tiliafolia*, *Kydiacalicina*.

C. Semi evergreen type (2A/C2): This type of forests are seen in parts of Hanagere State Forests, and Kumadwathi State Forests. The important species found are Dipterocarpus, Hopea, Schlichahera, terminalia, Xylia, Michelia and Bambusa species etc.

There is a large variety of plant community which attributes to the Herbivore population. There are Emblica officinalis, Terminalia bellarica, Syzizium cumini, Grasses, Strobilanthus and Bamboosa available in plenty. For Carnivore animals the prey animals are Spotted deer, Sambar, Hare etc.,

D. PLANATIONS: The sanctuary has about 6000 Ha. Of Teak plantations of the age group from 10 to 70 years. Of these Sacrebyle range has 1622.00 Ha, Shimoga Range 1185.00 Ha and Hanagere 3193.00 Ha. In these plantations, silvicultural thinning has to be done on a phased manner. Judicious thinning will also encourage natural growth and propagation of various native species including Bamboos, Herbs, Shrubs, various grasses.

Regular thinning of these plantations as per the thinning cycle has not been done, this resulted in congestion. Hence it is proposed for opening canopy of these older plantations by way of silvicultural cum mechanical thinning. This will help –

1. Getting natural regeneration of miscellaneous species and other fodder grass.
2. Congestion removal in turn reduces the fire hazards.
3. Revenue to Government by sale of the thinned material.
4. Habitat improvement by reducing the monocrop and in turn supporting the natural regeneration.

List of Teak plantations in Shimoga Wildlife Division and Teak plantations to be taken up for thinning during 2005 to 2015 are enclosed in the annexure.

Extensive fuel wood and Eucalyptus plantations raised by Mysore Paper Mills Ltd., and Karnataka Forest Development Corporation are also existing in the sanctuary. Extraction of these plantations needs to be restricted. However, as monoculture exotic plantations are not eco-friendly, gradual removal of exotic plantations and replacing with local species which are eco-friendly may be taken up. During 2004 the plantation raised by the above mentioned firms have been handed over to this division for further maintenance. List of the plantations handed over is shown in Annexure-. Thinning and gradual introduction of native species needs to be resorted to.

2.6.1.3. Species and communities of conservation importance:

Sl. No.	Common Name in Kannada	Botanical Name
1	Teak	<i>Tectona grandis</i>
2	Matti	<i>Terminalia tomentosa</i>
3	Hunalu	<i>Terminalia peniculata</i>
4	Nandi	<i>Lagerstroemia lanceolata</i>
5	Yethyaga	<i>Adina cordifolia</i>
6	Honne	<i>Pterocarpus marsupium</i>
7	Beete	<i>Dalbergia latifolia</i>
8	Hippe	<i>Madhuka indica</i>
9	Kadwala	<i>Mitragyna parviflora</i>
10	Dindiga	<i>Anogeissus latifolia</i>
11	Muttuga	<i>Butea monosperma</i>
12	Tare	<i>Terminalia bellarica</i>
13	Buruga	<i>Salmalia malabaricum</i>
14	Neralu	<i>Syzigium cumini</i>
15	Jambe	<i>Xylia xylocarpa</i>
16	Bende	<i>Kydia calicina</i>
17	Godda	<i>Lannaea coromandelica</i>
18	Srigandha	<i>Santalum album</i>
19	Nelli	<i>Embllica officinalis</i>

20	Shivaneer	Gmelina arorea
21	Char	Buchanania lanzan
22	Maddalas	Alstronea scholaris
23	Antaval	Sapindus emarginatus
24	Gulmavu	Machilus macarantha
25	Kavalu	Careya arborea
26	Kanagal	Delinia pentagyna
SHRUBS:		
1	Kakke	Cassia fistula
2	Haggare	Randia dumetorium
CLAIMBERS:		
1	Seege	Acacia concina
2	Neerahalli	Calicopteres floribunda
BAMBOOS:		
1	Hebbiduru	Bambusa aurandianaecea
2	Medar bamboo	Dendrocalamus strictus

2.6.2. ANIMALS:

2.6.2.1: Vertebrates, there status distribution and habitat:

A casual visitor to the sanctuary will be disappointed by the apparent absence of animals except for the raising and falling resonant trill of cicadas and in some parts of blood sucking leeches in monsoon and the rapacious ticks in summer. Given that, travel in the forest is never silent, most creatures are either hiding or have vacated long before our arrival. In reality, the sanctuary fabulously rich in animal life. They show their presence with unusually with their colours, smells, movements and noises, which will penetrate the wall of the green and distinguish each animal from thousand of other species with which it shares the forest. They use distinctive signals to communicate. Many are adopted nocturnal habit.

Almost all the kinds of wild animals found in southern India are found in the sanctuary.

(a) PREY ANIMALS:

1. **SPOTTED DEER:** (*Axis-axis*) The sanctuary contains fairly good stock of spotted deer in the eastern portion. They are indicator species. They are usually in herds of 5 to 10.
2. **SAMBAR:** (*Cervus Uni-colour*) The animals are also fairly in good number, mostly seen in the western portion of the sanctuary.
3. **INDIAN GAUR:** (*Bison*) (*Bos gaurus*) They are seen mostly in the western part of the sanctuary. They feed on grasses, *Strobilanthus* and Bamboos.

In addition to the above Indian Wild Boar, Indian Porcupine, Hare and common langurs are available in plenty.

(b) PREDATORS:

Panthers, Tigers, Indian Wild Dogs, Pythons and King Cobras are the main predator animals found in the sanctuary.

(c) SCAVANGERS:

Jackals, Hyenas and vultures are the main scavengers found in the sanctuary.

(d) OTHER ANIMALS FOUND IN THE AREA:

1. **INDIAN ELEPHANT:** (*Elephus maximus*) There are few elephants in the sanctuary which feed on abundant Bamboos which are available in the sanctuary. But during dry season, they stray in to the human settlements located inside and adjacent to the sanctuary and damage the crops. There are incidences of human death, due to trampling by elephants.

A departmental Elephant camp is located inside the sanctuary at Sacrebyle. These elephants also depend on the forage available in the sanctuary.

Sloth Bear, Malabar Squirrel, Monkeys, Tortoise are also seen in the sanctuary.

(e) **AQUATIC HABITAT:** The Tunga reservoir bordering the sanctuary has a good population of otter, fish and some crocodiles, water birds like Cormorants and Snake birds visit the river island near Mandagadde in Tunga river bordering the sanctuary. This area is already developed and attracts a large number of visitors during June to October.

(f) **AVIFAUNA:** The sanctuary has a very good population of birds like Grey jungle Fowl, Wood peckers, Fly catchers, King fishers, Whistling teal, Bulbuls, Mynas, Pea fowls, Bee eater etc.

2.6.2.2: The limiting factors: The sanctuary has 32 enclosures and 70 villages inside the sanctuary. - people and - cattle stay inside the sanctuary. The size of the revenue enclosure, vary from few house hold to a maximum of 110 house hold. The majority of the houses are Mangalore tiled and few are thatched. There are very few RCC buildings. 95% of the people are dependent on agriculture. People also encroached forest land mainly for cultivation purpose. Illicit felling of trees inside and outside the sanctuary has come down drastically over the years and it is almost nothing now.

2.6.2.3.2: Important invertebrates, there status, distribution and Habitat: The invertebrates fauna found in the Shettihalli wildlife sanctuary are butterfly, beatles, snakes, crab, cockroaches, earth worms, ants, termites, honeybees, scorpions, leeches etc., Their endemic status and distribution is yet to be studied.

CHAPTER – 3

HISTORY OF MANAGEMENT

3.1: General:

Western Ghats are known for their luxuriant vegetation and reputed timbers from very early history. Timber was exported from west coast of India in large quantities to Arabia and Persia for many centuries. Ownership of forests, as a tradition, was claimed by the de-facto rulers of the time. From the available historical records, it does not appear that, there was a separate establishment at any time to look after the forest management, nor there was any system in operation for the felling of trees until the British time. Ruling classes generally exercising power over selected species of trees by reserving them to the crown and prohibiting public from felling them. Different rulers exercised this prerogative in different ways. To a large extent, this prerogative was sold in auctions and leases to traders who were then give access to forest to cut and remove timber. They also sold blocks of forest for a certain sum down or rate per tree and the timber merchants were allowed to fell trees as they pleased. Some rulers attempted, through a specially established setup, to extract timber of reserve kinds, organize depots and conduct periodic sales.

During 20th century forest came to be organized very systematically, elaborate reporting by eminent officers about the waste full destruction of forest well preceded reservation of large areas of forest began. Working plans were prepared for very small and commercially attractive pocket of the reserved forests. Government monopolized the timber to the exclusion of local people, who had sufficient resource in un-organized forest area. Every act of local public including removal of dry leaf, hatch grass for agriculture, grazing, collecting of minor forest produce etc., were closely scrutinized and several un successful attempts were made to bring down the pressure on the forest. There are large extent of Teak and Eucalyptus plantations existing inside the sanctuary. The sanctuary is having about 6000 ha. of Teak plantations of the age group from 10 to 70 years. Of these, Sacrebyle range has 1622 ha, Shimoga range 1185 ha and Hanagere range 3193 ha. In these plantations, silvicultural thinning has to be done on a phased manner. Judicious thinning will also encourage natural growth and propagation of various native species including bamboos, herbs, shrubs and various grasses.

The forest coming under the Shettihalli wildlife sanctuary were previously under the control of the previously State of Mysore. The Mysore kingdom had been showing keen interest in the protection of forests, for better management of forests and wildlife, these forest area were declared as protected forests during 1905-1920. Since then these forests areas have been managed in a systematic way for fulfilling the needs of the people.

During 1960 -1965, Linganamakki reservoir was constructed in Sharavathi river valley, which leads to a submersion of many villages. The people affected by this Hydro-Electric Project ,were shifted from the project area and allowed to settle in the present Shettihalli wildlife sanctuary. In this way more settlements of rehabilitated village come in to existence in the sanctuary leading to encroachments and clearing of forests.

After declaration of Shettihalalli wildlife sanctuary, vide Government order No. AFD-47, FWL-74 dated: 23.11.1974, protection and development activities towards better management of wildlife had been initiated by the wildlife wing of the forest department, with the handing over the sanctuary to the wildlife wing by the territorial wing, these activities have been intensified.

The sanctuary has got a number of good timber species viz Teak, Rosewood, Honne, Nandi, Mathi, Hunalu etc. At present timber harvesting is stopped and it is mainly conservation oriented. Previously these areas were worked by clear felling for raising Teak and Eucalyptus plantation. Plantations were earlier raised by the Mysore Paper Mills Ltd., Karnataka Forest Development Corporation have handed over the plantations to the wildlife division. Thining of Teak plantation were taken up during 1995-96 to 1999-2000 for the better management of the plantations. Thinning of the remaining teak plantations have to be taken up . The thinning will boost up the natural regeneration and improve the habitat substantially.

Wildlife management is a refreshingly multi dimensional and multi disciplinary study with over tones of constitutional, legislative and judicial strands makes it unique, synthetic and zeal oriented for restructuring, reorienting and revamping vanishing wildlife.

Sri Ambadi Madhav, Deputy Conservator of Forests, Wildlife Division, Shimoga had prepared the existing management plan for a period of 5 years from 2000 to 2005. The plan was oriented towards creation of water resources, habitat improvement and creation of infrastructure etc. The objectives are partially implemented and there is a need to continue the above mentioned objectives in this management plan period also, for the period of 2006 to 2015.

3.2: TIMBER OPERATIONS INCLUDING BAMBOO AND FIRE WOOD HARVEST:

3.2.1: Silvicultural systems and tending operation:

Preior to 1902 these forests were reserved as timber forests at the time when the forest conservancy was introduced in the sate in the year 1863. Accessible areas of teak badly suffered a heavy depletion of growing stick owing to reckless felling carried out by the contractors. Between 1902 and 1917, a provisional working scheme was drawn up and regulated working was introduced in 1902. Minimum exploitable girths were fixed for important marketable species and felling of $\frac{1}{2}$ to $\frac{1}{3}$ of the stock of exploitable trees was prescribed in an arbitrary manner in the annual coupes which extended to 5% of the area in Shankar forests and unpromising teak poles, cutting of climbers and planting with nursery raised seedlings in felled areas and larged gaps resulted by the death of big bamboo clumps.

The sanctuary has got a number of good timber species viz. Teak, Rosewood, Honne, Nandi, Matti, Hunalu etc. At present timber harvesting is stopped and it is mainly conservation oriented. Previously these areas were worked by clear felling for raising Teak and Eucalyptus plantation. Plantations were earlier raised by the Mysore Paper Mills Ltd., Karnataka Forest Development Corporation have handed over the plantations to the wildlife division. Thinning of Teak plantations ware taken up during 1995-96 to

1999-2000 for the better management of the plantations. Thinning of the remaining teak plantations have to be taken up . The thinning will boost up the natural regeneration and improve the habitat substantially.

3.2.2: Even aged systems and uneven aged systems: There is no extraction of dead and fallen timber or fire wood, no extraction of bamboos, and no clear felling of plantations raised inside the sanctuary.

3.2.3: Bamboo working:

There is no Bamboo working in the sanctuary.

3.2.4: Fire wood harvest and collection: There is no fire wood harvest and collection in the sanctuary.

3.3: Non wood forest produce (NWP) collection: There is no non wood forest produce collection in the sanctuary:

3.4: Leases: There is no lease in the sanctuary.

3.5: Other programmes and activities: Apart from the Management of the sanctuary, programmes like eco-tourisms, eco-developments, Research and Monitory, Protection of habitat has been introduced in the sanctuary.

3.6: Forest protection:

3.6.1: Legal status: The Government of Karnataka vide notification No. AFD-47, FWL-74 dated: 23.11.1974 (Annexure-Ia) and final notification No. AFD-47, FWL-74 dated: 25.01.1977 (Annexure-Ib) declared the Shettihalli wildlife sanctuary with boundaries as follows.

North: From Ayanur along the Southern portion of Ayanur – Hosanagara road up to Rippenpet running from East to West.

West: From Rippenpet along Eastern portion of Rippenpet - Thirthahalli road including Mugudthi State forest up to Konandur which runs north to south.

South: From Konandur the boundaries of Rippenpet, Hanagaere and Thrithahalli range forest area up to Mandagadde running from West to East.

South– East: From Mandagadde along the western portion of Shimoga – Mangalore road up to Shimoga running from South to North East.

North – East: Starting from Shimoga, the line runs along the western portion of Bangalore - Honnavar road up to Ayanur.

At present the boundaries defined are not demarcated completely. Some permanent features like main road demarcate the boundaries of the sanctuary area. There is need to rationalize the boundaries of the sanctuary. And survey and demarcate the boundaries. Then reissue of notification as per the fresh survey and demarcation has to be taken up on top priority.

3.6.2: Hunting: There are few number of licensed crop protection guns inside the sanctuary. These weapons are some times used for poaching. Deer, Wild pig, Birds are hunted. Now due to more awareness among the local people, more intense patrolling by forest department, the poaching is negligible or nil.

3.6.3: ILLEGAL ACTIVITIES:

3.6.3.1: Poaching: There are few number of licensed crop protection guns inside the sanctuary. These weapons are some times used for poaching. Deer, Wild pig, Birds are hunted. Now due to more awareness among the local people, more intense patrolling by forest department, the poaching is negligible or nil.

3.6.3.2: Illegal cutting of trees: The sanctuary has 32 enclosures and 70 villages inside the sanctuary. - people and - cattle stay inside the sanctuary. The size of the

revenue enclosure varies from few house hold to a maximum of 110 house hold. The majority of the houses are Mangalore tiled and few are thatched. There are very few RCC buildings. 95% of the people are dependent on agriculture. People also encroached forest land mainly for cultivation purpose. Illicit felling of trees inside and outside the sanctuary has come down drastically over the years and it is almost nothing now.

3.6.3.3: Illegal removal of NWP: Due to the presence of villages and settlements inside the sanctuary, the people are collecting the NWP for their bonafide purposes in minor quantities.

3.6.3.4: Encroachment and other illegal activities: There are about 383 families and 616.18 Ha of encroachment before 1978 and 1292 families and 989.43 ha. after 1978 with in the sanctuary who have occupied 1605.61 ha. Of forest. These figures are provisional. Detailed survey may change the figures. Presently the encroachments have come to a grinding halt. But retrieving the lost forest land is still incomplete. Some of these encroached land are deep inside the forest and constitutes small pockets of land. The encroachers tend to interfere with the flora and fauna around these encroachments and as a result, the zone of influence around such pockets is disproportionately large. Evection proceedings are under way as per law.

3.6.4: Domestic live stock grazing: For long time in the early history, cattle were regarded as wealth. Though not to the same extent, the situation now also remains same in the sanctuary area. There are no sheep, goats, donkeys, horses and pigs with in the sanctuary but the cattle including cows and buffalos are in good numbers. The cows and bulls belong to a non descript breed known as "Malenad giddas". They are smaller in size with stunted growth and have no definite breed character spics. These animals have for centuries been playing an important role in the rural economy of the region. Farmers spend practical nothing towards the feed.

Of late, these animals are used mainly for generating farm yard manure and partly to generate income during hard times by sale of calves. Farm yard manure is generated by providing a bed of dry leaves in the cattle sheds where these animals are made to stand day after day urinating and defecating in the same place for weeks. The manure so generated is taken out of the shed once in 2 to 3 months. It is impossible for any other breed of cattle to under go this ordeal and still survive.

Nearly 4600 cattle heads graze inside the sanctuary.

3.6.5: Wild fires: Fire is a great threat in the sanctuary as the majority of the area comes under dry deciduous and moist deciduous types of forests. Usually it begins to appear during the end of January till the end of May. Fires are found especially around the habitation. On a single day fire may be found in the 10 to 15 places.

More number of people and jeeps are deployed in addition to the regular staff to fight against the fire. Almost the entire regular establishment is devoted to fire protection works for the period of five months from January. The strategy is locating groups of people, to detect and put off the fire around fire prone locations has proved successful. Although it is not possible to detect the offenders, in all the fire incidents it can reasonably presumed that the local people, to get fresh green grass for their cattle, kindle fires in a large measure. There are a few retaliatory fires especially to scare away the wild pigs. There is no major damage to the natural tree vegetation in the last five years. Even the dried bamboo area is more susceptible for fire. Given the present circumstances the number of fires and their spread can be controlled to certain extent by better organization and communication, but it can not be eliminated totally.

3.6.6: Inset attacks and pathological problems: There is no inset attacks are pathological problem found in the sanctuary.

3.7. TOURISM: The following are the existing tourism facilities:

a. SACREBYLE ELEPHANT CAMP

Sacrebyle elephant camp is situated on the Shimoga - Mangalore highway and it is 14 Kms from Shimoga city, at Sacrebyle village. The camp elephants are being used for taming of wild elephants, training of elephants and for logging works.

At present there are 19 elephants and 2 calves in the camp.

Daily activities of the camp elephants.

Every day morning the Mahouts and his assistant Kawadi will go to the forest, bring the elephant back to the camp, give bath to the elephants.

Ration:

Sl. No.	Name of the elephant	Details food					
		Paddy	Paddy straw	Rice	Coconut	Salt	Jaggery
1	New tusker	-	8.00 Kg	6.00 Kg.	-	150 gm	250 gm.
2	Shivu	-	8.00 Kg	6.00 Kg.	-	150 gm	250 gm.
3	Ganesh	8.00 Kg	8.00 Kg	6.00 Kg.	-	150 gm	250 gm.
4	Indira	-	8.00 Kg	-	-	150 gm	250 gm.
5	Lilli	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
6	Kaveri	-	8.00 Kg	8.00 Kg	8	150 gm	250 gm.
7	Kapila	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
8	Geetha	-	8.00 Kg	8.00 Kg	6	150 gm	250 gm.
9	Gayithri	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
10	Gange	-	8.00 Kg	8.00 Kg	-	150 gm	250 gm.
11	Subhadra	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
12	Ranga	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
13	Nethravathi	-	8.00 Kg	6.00 Kg.	3	150 gm	250 gm.
14	Sagar	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
15	Mayura	6.00 Kg.	8.00 Kg	-	3	150 gm	250 gm.
16	Shivagange	-	4.00 Kg	3.00 Kg.	-	150 gm	250 gm.
17	Thirtharama	6.00 Kg.	8.00 Kg	10.00 Kg.	-	150 gm	250 gm.
18	Kunthi	6.00 Kg.	8.00 Kg	-	-	150 gm	250 gm.
19	Vajra	-	-	1.00 Kg.			
20	Kaveri cub	-	-	-	-	-	-
21	Gange cub	-	-	-	-	-	-
22	Rajendra	-	8.00 Kg	10.00 Kg.	4	150 gm	250 gm.

After the feeding in the camp, the elephants again taken to river Thunga for drinking water and allowed to forest where there is sufficient fodder to feed till morning.

The elephants in the camp are as follows.

1. Male elephants – 9 Nos.
2. Female elephants – 10 Nos.
3. Calf elephants – 3 Nos.

The staff appointed for the management of elephants.

- | | | |
|---------------------|---|----|
| 1. Forester | – | 1 |
| 2. Elephant Jamedar | – | 1 |
| 3. Mahouts | – | 12 |
| 4. Kawadies | – | 14 |

There is a veterinary officer to look after the health of the animals periodically.

Details of elephants in the camp

Sl. No.	Name of the elephant	Sex	Age	Remarks
1	Shivu	Male	67 Year	
2	New tusker	Male	64 Year	
3	Ganesha	Male	21 Year	
4	Mayura	Male	18 Year	
5	Ranga	Male	15 Year	Sagar division for protection
6	Sagar	Female	13 Year	
7	Indira	Female	71 Year	
8	Kaveri	Female	69 Year	
9	Kunthi	Female	66 Year	
10	Gayathri	Female	62 Year	Bannerghatta National park
11	Subhadra	Female	58 Year	Sagar division for protection
12	Kapila	Female	55 Year	
13	Geetha	Female	55 Year	
14	Lilli	Female	54 Year	Bannerghatta National park
15	Gange	Female	49 Year	
16	Nethravathi	Female	6 Year	
17	Shivagange	Female	3 Year	
18	Theertharama	Male	13 Year	
19	Vajra	Male	2 Year	
20	Gange cub	Female	3 Months	
21	Kaveri cub	Male	2 ½ Months	
22	Rajendra	Male	26 Year	Handed over by Kolluru Mookambika temple, for temporary maintenance.

ABSTRACT

Male - 10 Nos.

Female	-	12 Nos.
Total:	-	22 Nos.

b. Mandagadde Bird Sanctuary: Mandagadde Bird Sanctuary is about 30 Kms from Shimoga on the left side of Shimoga-Thirthahalli main road. This is an Island in Thunaga river and 1.14 Acre in extent. The main flora in this bird sanctuary are Salix tetrasperma, Acacia, Bamboo, Rain tree and Vitex species are grown naturally along with the other trees species. These trees species give shelter to thousands of birds and help in breeding. This is a place for the migratory birds which come for breeding and feeding.

This is one among the other bird sanctuaries in Karnataka, the season starts from June to December. The migratory birds like egrets, darters, purple herons. Spoon bills, common sand pipers, stern gold flovers etc., come to this Island during the month of June and they build the nest, breed then fly away with the offspring, during November and December.

This Island is a place of attraction for the bird lovers and students, who has got inclination towards the birds. For the benefit of the tourists, the department has constructed the watch towers resting place and staff has been kept to look after the sanctuary clean and to guide the tourists.

3.8: RESEARCH, MONITORING AND TRAINING:

3.8.1: Research and Monitoring: Various aspects of the sanctuary need to be studied continuously. It is desirable to have census of wildlife once in five years. Ecological changes are too slow and imperceptible. Specialist like animal ecologist, botanist, veterinarian, and sociologist are necessary to probe. Research should cover:

- Spatial distribution of animals, population dynamics, seasonal migration, animal health and diseases.
- Habitat monitoring, check list of food plants, physical and phonological changes in vegetation quality and quantity of discharge in streams and rivulets, biotic disturbance.
- Sociological research on the local people and the interface between the vegetation, animals and people.

3.8.2: Training: At present training programmes are not under taken in the sanctuary. It is essential for the staff and officers of the protected area to be trained. And also

research scholars from the university may be asked to take up the project work on flora and fauna in the protected area.

3.9: Wildlife conservation strategies and their evaluation:

Through a series of measures, most of the objectives set out in the previous plan are achieved. Sanctuary is now totally free from timber extractions operations. Protection level is enhanced. Poaching has come down drastically. The forests have been regenerating very satisfactory. So faunal density is also growing appreciably. Constitution of the sanctuary and the restrictions thereon are also adequately publicized. The sanctuary is now at a crucial stage of take off. For achieving the plan objectives, the following strategies are necessary.

1. Provide for an efficient administration and effective protection.
2. Zonation of the sanctuary and zone wise prescriptions.
3. Habitat consolidation boundary.
4. Tourism.
5. Mitigate the external pressure.

STRATEGY-1: Protection: Proposals have been sent to the higher officers for reorganization of sections and beats. The work of blocks and compartment has to be re-do in the field level to identify and to monitor the sections and beats effectively.

STRATEGY-2: Habitat consolidation: The sanctuary was declared vide notification No. AFD-47 FWL-74 Dated: 23.11.1974 and final notification AFD-47 FWL-74 Dated: 25.01.1977. Totally 11 state forests, 14 minor forests and 3 plantation area have been included in the Shettihalli wildlife sanctuary to an extent of 395.60 Sq. Km. The boundaries of the sanctuaries are taken on the main roads all-round the sanctuary. There are townships and revenue land between these main roads and the forests existing within the sanctuary. Hence there is a necessity to rationalize the sanctuary boundary and re notify accordingly. In addition to this there are revenue lands inside the

sanctuary having good vegetation are to be notified under section 4(1) of Karnataka forest act 1963.

REHABILITATION OF INHABITANTS: There are 32 enclosures and 70 villages inside the sanctuary. the influence of the inhabitants and their cattle on the sanctuary will be humanly impossible because of their wide distribution and numbers. Conversely, the sanctuary will put the local people to lot of difficulties because of restrictions on rural development and wild animal's depredation in the interest of people's future developments, relocation and rehabilitation package needs to be offered to those who are willing to accept this. It may not be possible to rehabilitate all the inhabitants at one time. Therefore it may be taken up in stages. Otherwise the following action may be initiated. At present it very difficult to rehabilitate these villagers against their will. In order to restrict to their present hamlets and agricultural fields, it is very important to survey and demarcate the existing cultivated lands and the hamlets being occupied by them. The boundaries of the sanctuary and the enclosures will be marked using appropriate stone pillars and by digging of cattle proof trench.

STRATEGY-3: Park zonations: The sanctuary is classified in to zones as per the norms, for better management of the sanctuary. The details of zonations are as indicated below.

1. **Core Zone:** This zone comprises part of Hanagere state forest and part of Shankar state forest, excluding the enclosures. The area of core zone is 100.60 Sq. km.
2. **Buffer Zone:** This zone includes Purdal state forest, part of Anesara and Shankar state forest. Entire Sacrebyle, Kudi and Kumadwathi state forests, Harohithlu, Masarur, Baruve, Mugudthi state forests. Excluding enclosure, the total are of buffer zone is 237.40 Sq. Km.
3. **Tourism Zone:** It includes parts of Shankar, Kudi, Sacrebyle and Kumadwathi state forests. Tourism zone also includes Lion safari at Thyavarekoppa, Elephant camp at Sacrebyle and Bird sanctuary at Mandagadde. The total area is 57.60 Sq. Kms.

STRATEGY-4: Eco-Tourism: By definition eco-tourism is a responsible travel to natural areas that helps conserve the environment and sustains the well being of local people.

Objectives:

1. To spread the message regarding the need to preserve all form of fauna and flora and enable the public to see and appreciate the rich heritage of our country.
2. To educated the people especially those living nearby the sanctuary areas regarding the need to maintain such sanctuary and thereby enlisting their co-operation.
3. To inculcate in the minds of children love for all forms of wildlife and need for conservation of natural resources.
4. To provide wilderness experience to genuine enthusiasts in particular and to the public in general.
5. To provide for recreation and adventure sporting.

Tourist visits should maximize people's enjoyment and increase visitors concern for nature conservation. Without a well laid policy and guided programme, public tend to be ritualistic. Tourist facility should be so laid as to be accessible by public transport. A range of choices are necessary to suit different visitors. But providing rest and tranquility is common to all.

At present there are two forest bungalows at Shettihalli and Bellur respectively. There are three watch towers inside the sanctuary. The following can be developed to encourage tourism.

STRATEGY-5: Eco-Development: The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bona fide utilities, such as firewood, small timber, fodder and grazing lands and also suffer from the crop damages and cattle kill by wild animals. The objectives of the programme are to create alternative resources to the people living in and around the area. To relieve their dependency, to reduce pressure on the sanctuary and also to improve their socio economic conditions, so that they will co-operative with the wild life authorities in management of wildlife and the eco system.

The objectives of the eco development are as follows.

1. To reduce the pressure of the people on the protected areas like fuel wood, small timber and NTFP by making themselves sustained in their basic needs.
2. To improve the eco system and their bio diversities in the impacted zone.
3. To create alternate sources for the natural resources.
4. To improve the socio economic conditions of the people depending upon the sanctuary resources for sustenance and also to provide employment and income generating jobs to needy people.

3.10: ADMINISTRATIVE SETUP:

Organization of forest area: Each of the state forests, which forms a part of the sanctuary is quite big in size. Long back the state forests and minor forests existing inside the sanctuary was marked to blocks and compartments. Over a period time the block boards and compartment boards destroyed and there is a necessity to once again survey the area and to fix the new compartment and block boards. Demarcation of compartment boundary and beat boundary has to be marked on the map.

Administration: At present management and administrative control of Shettihalli wildlife sanctuary is done by Shimoga wildlife division, with head quarters at Shimoga. Parts of areas in Sacrebyle and Hanagere are yet to handed over by the regular division, Shimoga. The existing staff pattern is as follows.

A. Staff pattern of Shettihalli wildlife sanctuary:

Sl. No.	Staff	Sanctioned posts	Existing post	Vacant
1	Deputy Conservator of Forests	1	1	-
2	Asst. Conservator of Forests	1	1	-
3	Range Forest Officers	3	3	-
4	Superintendent	1	1	-
5	First Division Assistant	3	3	-
6	Second Division Assistant	2	2	-
7	Junior Engineer	1	1	-
9	Surveyor	1	1	-
10	Foresters	12	12	-
11	Forest guards	41	31	10
12	Forest watchers	10	10	-
13	Jamedars	2	2	-
14	Mahouts	23	9	9
15	Kawadies	18	14	4
16	Drivers	1	1	-
20	Peons	4	4	-
21	Cooks	2	2	-
23	M.R.	18	18	-

B. Details of Sections, Beats:

Sl. No.	Name of the Range	Sections	Beats
1	Shimoga WLR	Anesara	Anesara
			Kalkoppa
			Maleshankara
		Shettihalli (Anupinakatte)	Puradal-I
			Puradal-II
			Haihole-I
			Haihole-II
			Shettihalli – I
			Shettihalli-II

		Lion Safari	
		Protection cum Thinning unit staff	
2	Hanagere WLR	Hanagere	Hanagere
			Maskani
			Dobyle
			Belluru
			Kombinakai
			Kalligadde
			Gubbiga
			Basavanagadde
		Sirigere	Kalkoppa
			Chinmane
		Arasalu	Choudikere
			Harohithlu
			Baruve
		Reppenpete	Mugudthi
			Yogimalali
			Garathikere
		Protection cum thinning unit staff	
3	Sacrebyle WLR	Sacrebyle	Ballarikere
			Mathigundi
			Talale
			Ramenkoppa-II
			Sacrebyle (Sacrebyle-II)
		Protection cum thinning unit staff 1. Forester, 1 Guard.	

Reorganization of Sections and Beats have been prepared and submitted to the higher officers for sanction accordingly.

3.11: COMMUNICATION:

Wireless network and telephones: The sanctuary is provided with a good wireless network. There are five static wireless sets at range head quarters and Deputy Conservator of Forests office Shimoga and five mobile sets in the vehicles. And there are 39 No of walkie talkies distributed among officers, foresters and forest guards. There is one repeaters station established at Bendematti of Hanagere wildlife range. Recently the frequency upgraded to high band and all the static, mobile and walkie talkies are replaced with new ones. The repeater station is powered by solar panels. The system works very efficiently and message emanating from any source is circulated over the entire network. The system has proved very helpful especially in fire season and in protection.

The divisional office and all the range forest offices are connected by telephones.

3.12: SUMMARY OF THREADS TO WILDLIFE:

General: The sanctuary enjoyed a fair degree of protection on account of its populating density and nearby to Shimoga city. Staff provided originally for the management of the sanctuary is inadequate and some posts need to be shifted. A large number of posts remain unfilled. The principals under lining the protection is

- a. Providing protection to the natural flora and fauna against predation by human beings (smuggling, poaching, and encroachment).
- b. Management of fire.
- c. Protection of wildlife from live stock (communicable disease)
- d. Maintenance of boundary demarcation.
- e. Providing good communication to achieve all of above.
- f. Fencing to exclude domestic live stock from the area for the benefit of the wildlife.

- g. Creation and maintenance of fire breaks and fire lines.
- h. Conversion of monoculture exotic species plantation in to diversified wood lands.

Significance of wildlife habitat: Wildlife and wildlife habitat play a vital role in the ecological and biological processes that is essential to life itself. The functioning of the biosphere, and hence the maintenance and enhancement of human life, depends on countless inter actions among plants, animals and micro organisms.

These ecological processes are essential for agriculture, forestry, fisheries and other endeavors necessary to human life. They also help maintain environmental quality by degrading and otherwise removing some pollutants and by preventing waste accumulation. Some of the biological processes in which wild species play a key role are pollination, germination seed dispersal, soil generation, nutrient cycling, predation, habitat maintenance, waste break down and pest control.

Wildlife habitat regardless of whether it is upland or wetland habitat, is significant because of a number of functions it performs to support wildlife. Wildlife needs adequate space and habitat for the following basic life requirements:

- Safe, undisturbed area for breeding, both on land and in the water.
- Shelter, which can be underground, in the soil, on the land surface, in water, or in trees and shrubs.
- Food supply, which may require suitable habitat for the plants and animals that provide the food supply.
- Migratory routes and
- Over wintering areas for those species that require seasonal migration for shelter or breeding.

Establishing forest protection camp and intensive patrolling: In view of better protection and control the original section and beats have been reconstituted and proposals have been sent. Good protection is possible by intensive foot patrolling in

groups or teams. Protection will be easy if the field staff stay close to the forest. The forest protection camp should support every section forest officer. Each camp should consist of a group of three people and should be housed within the sanctuary in appropriately built camp sheds. Permanent staff should join the camp team on shift duties and patrol the beats and section very intensively and regularly. Permanent staff should lead the protection camp staff. Ideal patrol team size should be four people equipped with a weapon and wireless set. Establishing sufficient number of these camps and ensuring that all parts of the sanctuary are patrolled regularly is the most important aspect of protection.

List of places suggested for construction of semi permanent sheds is as under.

Sl. No.	Range	Locations
I	Sacrebyle WLR	Machanamatti Hulihalla Balapanamatti Sacrebylegudda
II	Hanagere WLR	Chinmane Bukkivare Choudikere Choudikatte Alase
III	Shimoga WLR	Haihole Maleshankara Bayalubasavanna Govindapura

The forest protection camp should be so designed to command a good view of the forest and should be accessible to the wireless network. Every camp should be provided with maps, minimum facilities for cooking, a weapon, a walkie, first aid kit and solar power. Free ration also have to be provided. Protection camps should attend to the problems relating to smuggling of timber, cattle grazing, fire, trekkers, litter, petty maintenance works etc. Each camp should maintain a daily movement cum observation register where in all kinds of information pertaining to the flora, fauna and offences should be registered. The proforma for recording daily information.

Fire management: Fire plays a very critical role in the habitat management. One of the main factors that have accelerated the degradation of forest cover is the occurrence of the fire which has almost become an annual feature. The graziers, fire wood and NTFP collectors and tourist tend to set fire deliberately or by accident. Smugglers and poachers also set fire to the forest to divert the attention of field staff. Due to the forest fire the natural regeneration is lost and the forests are deprived of rich humus. Wild animals particularly herbivores are the worst sufferers for want of green foliage. Wild innumerable soil fauna will be destroyed, which play a very important role in maintaining the ecological balance by decomposing and releasing energy from plant and animals. Hence preventive and fire control measures have been given much importance in the habitat development. Considering all these factors the following measures are suggested.

1. Fire line clearance & maintenance.
2. Employing fire watchers during summer.
3. Erection of watch towers.
4. Communication systems like roads, wireless sets, walkie talkie sets, telephones etc.
5. Establishing anti poaching squad.
6. Establishing manned checking gates.
7. Supply of guns and ammunitions to the staff.
8. Protection from grazing.

Creation and maintenance of fire breaks: Fire breaks should be created along the highway margins, game paths, and areas which are sensitive to fire. The fire breaks should be of 4 meters width. Fallen trees on these lines should be cleared and disposed off. The network of game paths and patrolling tracks, act as permanent fire breaks and they should be so maintained by annually clearing the grasses and other weed growth in the month of December. Normally these belts are fire traced. If the work of clearing of

fire breaks is under taken in late November or early December, it helps in generating a new flush of grass along the fire breaks. This work is found to be more effective than late clearance and fire tracing.

Fire zones are generally well known and therefore the required fire breaks have been identified and prescribed for annual clearing in the programme of work. The new fire breaks may be identified and created in the vulnerable forest area.

Fire detection and control: As the forest areas of the sanctuary are, plain to gentle sloppy areas, the detection of fire is easy from a hill top. The places ideal for this purpose are:

1. Shimoga Wildlife Range : Shankargudda
2. Sacrebyle Wildlife Range : Sacrebylegudda
3. Hanagare Wildlife Range : Bendematti.

Permanent watch towers should be constructed at these stations. Staff should be positioned on them. These teams should be dispatched in the provided jeep to the scene of fire immediately on message to put out the fire. Road network should be developed in a manner to enable these teams to reach the fire spots as early as possible. The forest protection camp may also be appropriately redeployed to keep a check on the fires and avail their services. Wild fire spreads rapidly and exponentially. The number of fires can not be reduced substantially in the near future but the extent of fire damage can be brought under control. Fire protection staff and arrangements should be in place by middle of December and can be wound up by the end of April. During exigencies more parties can be engaged and hired vehicles can be used.

Protection against grazing: Grazing is directly related to the human habitations inside the sanctuary. So long the enclosures exist and people are allowed to continue in their traditional agricultural profession, rearing of cattle is necessary to support their livelihoods. A sustained campaign of bringing awareness among the inhabitants may

slightly reduce the intensity of these activities but total control will only be possible when all the people are rehabilitated.

Protection against encroachment: The majority of the people who are living inside the sanctuary are the persons displaced from Sagar taluk after the construction of Linganamakki reservoir. These people migrated during the year 1960 to 1965. During that time some of the areas of the state forests have been cleared and handed over for the purpose of rehabilitation. Immediate action to be taken to take out the old Government notifications and the area as per the notification has to be identified on the ground. So that people living in the sanctuary are living in the released areas or living outside the released forest land may be ascertained.

Protection from communicable diseases: Although there was no recorded of epidemics to the wild animals, abundant precaution is necessary as any incident could wipe out the entire ungulate population. Immunization of cattle within the sanctuary as well as outside up to a radius of 3 Kms should be regularly done at Government cost. It is a permanent solution to the threat.

Poaching: Poaching of small game such as Indian hare, Barking deer is rather difficult to detect. Poaching of big game is not found. However vigil has to be maintained.

Communication facilities - Wireless network: For effective protection against theft, fire, grazing etc., good communication facilities are necessary. An efficient wireless network is already functional. Due to the addition to existing staff strength, sufficient numbers of walkie talkies are given to the front line staff. All the wireless equipments including the repeater station should be toned up and kept in good working condition round the year and especially during the fire season.

Development and maintenance of patrolling track network: A good road network is necessary to provide access to the remote areas. The existing road network has been developed keeping this aspect in mind. However there are still certain shortcomings

and all problematic areas are not accessible. Therefore new patrolling tracks should be planned, aligned carefully and developed at the earliest. Wherever necessary, bridges and culverts should be built. The roads so formed should be interconnected.

Boundary and “D” line maintenance: External boundaries have to be maintained clearly and regularly. Demarcation pillars engraved with sanctuary title should be planted all along the boundaries. Maintenance of internal boundaries especially around the enclosures is also necessary so long the rehabilitation programme is not completed. Rationalization of the boundary and re-issue of notification is to be completed.

Public education: People who are living inside the sanctuary are to be educated about the long term consequences of fire especially in terms of loss of soft palatable grasses and poor water retention. So a sustained campaign of public education through hand bills, films, posters, display boards etc., should be taken up. Serious efforts are also necessary to try and convince them to reduce the cattle numbers. Effective steps should be taken to prevent cattle grazing inside the sanctuary. It should form a part of the duties of the forest protection camps to dry away the cattle if and when found in the sanctuary.

Summary: Protection is an important aspect until the rehabilitation of all inhabitants is completed and must be taken up with all seriousness. Sighting of animals is a direct indication of the degree of protection given. The present level of animal density is too low and unless ungulates are well protected, the possibility of carnivores going up in number is remote. As such the carnivore density is low and if ecological balance is to be restored, protection should be treated as a fundamental strategy in the over all management of the sanctuary.

CHAPTER - 4

THE PROTECTED AREA AND THE INTERFACE LANDUSE SITUATION

4.1: The existing situation of the zone of Influences:

4.1.1: The location, extent, boundaries and natural attributes of the ZI: The Shettihalli wildlife sanctuary is surrounded by malenad villages. On the northern side it bound by Shimoga and Hosanagara taluks. On the eastern side it bound by Shimoga taluk. On the southern side it is bound by Bhadravathi thaluk. On western side it bound by Hosanagara and Thirthahalli taluks.

People have been living inside the sanctuary and in enclosures and drawing up on the forest for their daily needs. Therefore there is a zone of interference around each of these enclosures. The width of the zone depends on factors such as population size, extent of cultivated land, cattle population, size of land holding etc.

In addition there are many villages and settlements in a radial distance of 5 to 10 kms from the boundary of the sanctuary. There is more pressure on the sanctuary from outside villages because the number of people, cattle and cultivated land is many times more. They are also dependent on the sanctuary resources, be it water, grass, climbers, Bamboos, Fencing materials etc. Available forest cover with in this zone is surrogate measures of the biotic pressure.

4.1.2.: Villages inside and outside the PA. Ethnic and identities, traditions, costumes, relationships between district groups of people, relationship with forests: The sanctuary has 32 enclosures and 70 villages inside the sanctuary. - people and - cattle stay inside the sanctuary. The size of the revenue enclosure, vary from few house hold to a maximum of 110 house hold. The majority of the houses are Mangalore tiled and few are thatched. There are very few RCC buildings. 95% of the people are dependent on agriculture. People also encroached forest land mainly for cultivation purpose. Illicit felling of trees inside and outside the sanctuary has come down drastically over the years and it is almost nothing now.

4.1.3.: The state of the peoples economy, vocations and land use: Almost all the population in and around the sanctuary is based on agriculture. There are no big, small or home industries. 80% of the population is small and marginal farmers. Seldom

people have disposable surplus income. Every family has a first preference to grow food grains for home consumptions. Only few families in addition to the agricultural land has areca gardens. However garden lands are looked after well irrespective of the returns because it keeps swinging widely and there is hope that it would be profitable day. Economic slump lade off a large part of agriculture labour force and therefore some of the male members migrate to near by towns for employment. But the number is small. The adverse effect of general economic situation is not harsh on the local people mainly because of stable monsoons and production of basic minimum food grain by each house hold.

4.1.4.: Implications of the land use and resource dependency for the conservation of PA: Lifestyle in Malenad region is such that people use fuel wood very liberally both for cooking and heating purposes. Fuel wood consumption is therefore quite high. As a preparatory to the monsoon, every house hold collects 4 to 5 cart loads of dry fire wood, either round or split and nearly consumes the entire quantity by the end of monsoon. Just before the monsoon, every house hold is deployed exclusively on gathering of fire wood and if the same is not available sufficiently in and around their homes, they sneak in to near by forest and carry by head loads. Dry fuel wood is one of the biggest demand just before monsoon. In any case, people from outside the sanctuary normally do not venture for more than 1 to 2 kms deep in to the forest.

PART – II
PROPOSED MANAGEMENT

CHAPTER – 5
PLAN OBJECTIVES AND PROBLEMS

5.1: Objectives of Management: Shettihalli wildlife sanctuary is a unique and intact piece of forest harboring diverse rich flora and fauna with distinct ecological features. The prime objectives for the management of the sanctuary are as follows.

- To protect the sanctuary to the fullest extent possible so that many endangered and endemic flora and fauna inhabiting the area are adequately protected and propagated.
- Arrest and reverse the trend of forest degradation due to the unsustainable removal of forest products by communities living in and around the forest areas. Restore the degraded portions of the division to its original glory, through habitat improvements and watershed managements.
- Reverse the trend of forest degradation due to monoculture exotic species plantation by gradually thinning the exotic species and introducing the local species and fruit yielding species.
- Develop water resources through plantations and water harvesting programme. Treatment of micro watershed in the project are by soil conservation, ground water recharge to rejuvenate the degraded habitats and improve the site quality. Improving the ground water recharge by desilting the existing water holes, construction of check dams etc. to create awareness among the people about the need to protect the nature in general and sanctuary in particular.

- To maintain and develop, to extent considered necessary tourism for recreation, education and scientific exploration. To provide wilderness experience to genuine enthusiasts in particular and to the interested public in general. To enable the public to see and appreciate the rich heritage of our country.
- Involve the people living inside the sanctuary in protection, wildlife conservation, identify and promote eco-friendly practices and life style pattern by way of meeting ecological awareness among people.
- Create durable community assets for such populations, which would contribute to over all eco-development in the target areas. To reduce the negative impacts of people of the protected area and resolve man-animal conflict and vise-versa through eco-development activities and conservation education.
- To provide for capacity building for efficient management of the sanctuary through better training of staff, infrastructure and close monitoring.
- To promote and encourage wildlife research and ecological studies consistent with the long term management objectives.

5.2: Problems in achieving objectives:

- a) Presence of large number of settlements in the sanctuary.
- b) Fire and grazing pressure.
- c) Exotic plantations.

CHAPTER – 6

THE STRATEGIES

6.1: Boundaries: The boundaries have been already dealt in chapter-II, elaborately.

6.2.: Zonation and zone plans: The sanctuary is classified in to zones as per the norms, for better management of the sanctuary. The details of zonations are as indicated below.

1. **Core Zone:** This zone comprises part of Hanagere state forest and part of Shankar state forest, excluding the enclosures. The area of core zone is 100.60 Sq. km.
2. **Buffer Zone:** This zone includes Purdal state forest, part of Anesara and Shankar state forest. Entire Sacrebyle, Kudi and Kumadwathi state forests, Harohithlu, Masarur, Baruve, Mugudthi state forests. Excluding enclosure, the total are of buffer zone is 237.40 Sq. Km.
3. **Tourism Zone:** It includes parts of Shankar, Kudi, Sacrebyle and Kumadwathi state forests. Tourism zone also includes Lion safari at Thyavarekoppa, Elephant camp at Sacrebyle and Bird sanctuary at Mandagadde. The total area is 57.60 Sq. Kms.

People have been living inside the sanctuary and in enclosures and drawing up on the forest for their daily needs. Therefore there is a zone of interference around each of these enclosures. The width of the zone depends on factors such as population size, extent of cultivated land, cattle population, size of land holding etc.

In addition there are many villages and settlements in a radial distance of 5 to 10 kms from the boundary of the sanctuary. There is more pressure on the sanctuary from outside villages because the number of people, cattle and cultivated land is many times more. They are also dependent on the sanctuary resources, be it water, grass, climbers, Bamboos, Fencing materials etc. Available forest cover with in this zone is surrogate measures of the biotic pressure.

Lifestyle in Malenad region is such that people use fuel wood very liberally both for cooking and heating purposes. Fuel wood consumption is therefore quite high. As a preparatory to the monsoon, every house hold collects 4 to 5 cart loads of dry fire wood, either round or split and nearly consumes the entire quantity by the end of monsoon. Just before the monsoon, every house hold is deployed exclusively on gathering of fire wood and if the same is not available sufficiently in and around their homes, they sneak in to near by forest and carry by head loads. Dry fuel wood is one of the biggest demands just before monsoon. In any case, people from outside the sanctuary normally do not venture for more than 1 to 2 kms deep in to the forest.

6.3: Theme plans: Through a series of measures, most of the objectives set out in the previous plan are achieved. Sanctuary is now totally free from timber extractions operations. Protection level is enhanced. Poaching has come down drastically. The forests have been regenerating very satisfactory. So faunal density is also growing appreciably. Constitution of the sanctuary and the restrictions thereon are also adequately publicized. The sanctuary is now at a crucial stage of take off. For achieving the plan objectives, the following strategies are necessary.

1. Provide for an efficient administration and effective protection.
2. Zonation of the sanctuary and zone wise prescriptions.
3. Habitat consolidation boundary.
4. Tourism.
5. Mitigate the external pressure.

STRATEGY-1: Protection: Proposals have been sent to the higher officers for reorganization of sections and beats. The work of blocks and compartment has to be re-do in the field level to identify and to monitor the sections and beats effectively.

STRATEGY-2: Habitat consolidation: The sanctuary was declared vide notification No. AFD-47 FWL-74 Dated: 23.11.1974 and final notification AFD-47 FWL-74 Dated: 25.01.1977. Totally 11 state forests, 14 minor forests and 3 plantation area have been

included in the Shettihalli wildlife sanctuary to an extent of 395.60 Sq. Km. The boundaries of the sanctuaries are taken on the main roads all-round the sanctuary. There are townships and revenue land between these main roads and the forests existing with in the sanctuary. Hence there is a necessity to rationalize the sanctuary boundary and re notify accordingly. In addition to this there are revenue lands inside the sanctuary having good vegetation are to be notified under section 4(1) of Karnataka forest act 1963.

REHABILITATION OF INHABITANTS: There are 32 enclosures and 70 villages inside the sanctuary. The influence of the inhabitants and their cattle on the sanctuary will be humanly impossible because of their wide distribution and numbers. Conversely, the sanctuary will put the local people to lot of difficulties because of restrictions on rural development and wild animal's depredation in the interest of people's future developments, relocation and rehabilitation package needs to be offered to those who are willing to accept this. It may not be possible to rehabilitate all the inhabitants at one time. Therefore it may be taken up in stages. Otherwise the following action may be initiated. At present it very difficult to rehabilitate these villagers against their will. In order to restrict to their present hamlets and agricultural fields, it is very important to survey and demarcate the existing cultivated lands and the hamlets being occupied by them. The boundaries of the sanctuary and the enclosures will be marked using appropriate stone pillars and by digging of cattle proof trench.

STRATEGY-4: Eco-Tourism: By definition eco-tourism is a responsible travel to natural areas that helps conserve the environment and sustains the well being of local people.

OBJECTIVES:

1. To spread the message regarding the need to preserve all form of fauna and flora and enable the public to see and appreciate the rich heritage of our country.

2. To educate the people especially those living nearby the sanctuary areas regarding the need to maintain such sanctuary and thereby enlisting their co-operation.
3. To inculcate in the minds of children love for all forms of wildlife and need for conservation of natural resources.
4. To provide wilderness experience to genuine enthusiasts in particular and to the public in general.
5. To provide for recreation and adventure sporting.

Tourist visits should maximize people's enjoyment and increase visitors concern for nature conservation. Without a well laid policy and guided programme, public tend to be ritualistic. Tourist facility should be so laid as to be accessible by public transport. A range of choices are necessary to suit different visitors. But providing rest and tranquility is common to all.

At present there are two forest bungalows at Shettihalli and Bellur respectively. There are three watch towers inside the sanctuary. The following can be developed to encourage tourism.

STRATEGY-5: Eco-Development: The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bona fide utilities, such as firewood, small timber, fodder and grazing lands and also suffer from the crop damages and cattle kill by wild animals. The objectives of the programme are to create alternative resources to the people living in and around the area. To relieve their dependency and to reduce pressure on the sanctuary and also to improve their socio economic conditions so that they will co-operative with the wild life authorities in management of wildlife and the eco system.

The objectives of the eco development are as follows.

1. To reduce the pressure of the people on the protected areas like fuel wood, small timber and NTFP by making themselves sustained in their basic needs.

2. To improve the eco system and their bio diversities in the impacted zone.
3. To create alternate sources for the natural resources.
4. To improve the socio economic conditions of the people depending upon the sanctuary resources for sustenance and also to provide employment and income generating jobs to needy people.

CHAPTER – 7
TOURISM, INTERPRETATION AND CONSERVATION EDUCATION

7.1: General: It is recognized that unless people from different walks of life see and experience for themselves the serenity and beauty of the natural environment, the sheer richness, complexity and delicate balance that exist with in the biological world and grand nature of many rare and endangered species. They are unlikely to appreciate the true value of biodiversity conservation and in turn the required public support may be found wanting.

7.2: Objectives: Eco-tourism is markedly different from other kinds of tourism and requires a sensitive cautious approach including meticulous planning. So lot of planning is necessary to enhance the physical carrying capacity and also ensure that visitors experience the wilderness.

1. To spread the message regarding the need to reserve all forms of fauna and flora and enable the public to see and appreciate the rich heritage of our country.
2. To educate the people especially those living near by the sanctuary areas regarding the need to maintain such sanctuary and there by enlisting their cooperation.
3. To inculcate in the minds of children love for all forms of wildlife and need for conservation of natural resources.
4. To provide wilderness experience to genuine enthusiasts in particular and to the public in general.
5. To provide for recreation and adventure sporting.

Tourist visits should maximize people enjoyment and increase visitors concern for nature conservation. Without a well laid policy and guided programme, visits tend to be ritualistic. Tourist facility should be so late as to be accessible by public transport. A range of choices are necessary to suit different visitors. But providing rest and tranquility is common to all.

At present there are two forest bungalows at Shettihalli and Bellur respectively. There are three watch towers inside the sanctuary.

7.3: Problems: As explained in the previous chapters there are many settlements inside the sanctuary. Rehabilitation of these peoples have been discussed.

7.4: The strategies:

7.4.1: Identification of the zone: There are three distinct zones identified for tourism, core and buffer zone. Eco-tourism may be conducted in tourism zone.

7.4.2: Infrastructure:

Nature Education camp: Nature camps are mainly meant for young groups, school children etc. At present there is one nature camp at Lion safari. Presently it is not ideal to camp due to floating influx of tourist. Hence Shettihalli may be considered for setting up of nature camps. Functional facilities like make shift accommodation, cooking, drinking water, toilets, interpretation centre, large open space, a small library, audio visuals etc., are necessary to entertain the groups for 2-3 days. Low cost books, stickers, posters etc., on environment, wildlife and forest may be supplied to the participant. A detailed permanent map of the sanctuary, resource persons for regular talks and local guides are necessary for each camp. The activities for visitors may include trekking, wildlife viewing from watch towers, collection of antlers feathers, identification of plants bird watching, painting etc.

Game paths: Game paths will be open to tourist as per their requirements. The target groups are students, youths and teachers. Private vehicles may be franchised to take tourist on these routes on fixed charges. A trained guide / department staff should accompany such hired vehicles.

Trekking paths: There is also a need for developing certain trekking paths from the fringe to the nearest hill peak are to a specific landscape elements. These trekking paths should be well laid out, provided with good signages and manned by trained local

youth who will act as guide. Separate skill development training should be held for the local youth for this purpose. Further considering the requirements of various trekking groups, routes may chalked out in future.

Eco-Tourism guide lines:

1. Activities permitted are trekking, bird watching, photography, swimming in the notified places, and wildlife viewing without disturbing them.
2. Group activities should be encouraged
3. Guide should be selected, trained and made available to the visitors all cost.
4. The tourist should be given a thorough briefing of do's and don't's and it should be included in the guide book.

7.4.3: Regulations, monitoring and evaluation: Impact of the tourism should be monitor closely by observing the sighting chances of wild animals visible impacts of litter, wear out of the trekking paths, degradation of the vegetation, frequent encounter of such other by tourist etc., to determine the carrying capacity and accordingly the tourist number should be controlled.

CENSUS: Till now, not a single scientific population estimation has been made for any species and this is a big lacuna on the part of the management. Census of wild fauna is a difficult task given the habitat conditions, low density and availability of water round the year. Mega fauna such as Gaur, Sambars and Deer etc., which live in herds can be easily located and recognized by the local forest protection camps. They should keep a watch on the population size of these herds and trends. The data reported by them should be screened to arrive at an estimate of their population. Alternatively transect estimate can also be taken up. Other important species such as Bears, King cobra, Horn bill etc., are very difficult to sight and therefore population estimates can only be on the basis of random sampling.

A single time operation for population estimation is unlikely to yield correct data. Therefore qualified staff may be separately engaged for this task.

Research and monitoring: There is no separate research section in the wildlife wing. Academic and research institutions conduct most of the research work with their own funding. Usually the research work is isolated and unconcerned with the management issues of the PA. Findings of the research work are not made available. Considering the high bio diversity and a conglomeration of agencies working on different subjects, there is a need to monitor research work very closely at the PA level itself.

7.4.4: Publicity: Publicity is the basic ingredient for building any opinion or brand image. The need to develop an opinion for the sanctuary is very essential for its survival in long term. It will also aid in removal of any misgivings if any about the sanctuary. The following activities are enlisted.

- Nature education camps for students and teachers of schools and colleges.
- Workshops for local community leaders like members of Gram panchayat, Taluka panchayat and Zillah panchayat, and other elected representatives.
- Publishing of posters, hand bills, pamphlets and brochures etc.

CHAPTER – 8

ECO-DEVELOPMENT

8.1.: Objectives: The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bona fide utilities, such as firewood, small timber, fodder and grazing lands and also suffer from the crop damages and cattle kill by wild animals. The objectives of the programme are to create alternative resources to the people living in and around the area.

There can not be any development and protection of the sanctuary without the active co-operation and support of the local population. Many people do not have basic facilities like safe potable water, health services, education, electricity etc. The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bonafide uses such as fire wood, small timber, fodder and grazing land and also suffer from the crop damage and cattle kill by the wild animals. The objectives of the programme are to create alternative resources to the people in and around the area. To relive their dependency, and to reduce pressure on the sanctuary and also to improve their socio economic condition, the peoples are required to be employed in the development works, so that they will cooperative with the wildlife authorities in management of wildlife and the ecosystem.

8.2: Specific issues:

The specific issues of the objectives are as follows for the eco-development.

1. To reduce the pressure of the people on the protected areas like fuel wood, small timber and NTFP by making themselves sustained in their basic needs.
2. To improve the eco system and their bio diversities in the impacted zone.
3. To create alternate sources for the natural resources.

4. To improve the socio economic conditions of the people depending upon the sanctuary resources for sustenance and also to provide employment and income generating jobs to needy people.

8.3: Broad strategies: The broad strategies are as under

- a) Subsidy for replacement of country cattle by improved varieties.
- b) Immunization of cattle against communicable diseases like render pest, foot and mouth diseases.
- c) Encouraging stall feeding and rearing high yielding cattle breeds by artificial insemination.
- d) Providing smokeless chulha to each family at Government cost.
- e) Encouraging gober gas plants by giving 50% subsidy.
- f) Supply of fuel wood and timber yielding seedlings to farmers to grow in their fields.
- g) Providing solar lights and solar cooker at Government cost.
- h) Raising fuel wood plantation in Panchayat village community lands.
- i) Providing solar heaters to backward village hostels.
- j) Supply of grafted variety of fruit yielding seedling and coconut seedlings to farmers to improve their economic conditions.
- k) Providing bee-hive boxes and training the people in bee keeping at Government cost.
- l) Encouraging modern agriculture by providing improved quality of agricultural seeds and exposing them for advanced and modern agricultural practices.
- m) Raising fodder farms and agro forestry.
- n) Supply of bamboos and poles to artisans and economically backward families.
- o) Arranging training to the villagers in basket making, agarbathi sticks and other cottage industries and to promote the marketing activities.
- p) Providing employment opportunities on temporary / permanent basis to the local people in C and D class jobs.

8.4: Protection of Habitat: The sanctuary enjoyed a fair degree of protection on account of its populating density and nearby to Shimoga city. Staff provided originally for the management of the sanctuary is inadequate and some posts need to be shifted. A large number of posts remain unfilled. The principals under lining the protection is

- a) Providing protection to the natural flora and fauna against predation by human beings (smuggling, poaching, and encroachment).
- b) Management of fire.
- c) Protection of wildlife from live stock (communicable disease)
- d) Maintenance of boundary demarcation.
- e) Providing good communication to achieve all of above.
- f) Fencing to exclude domestic live stock from the area for the benefit of the wildlife.
- g) Creation and maintenance of fire breaks and fire lines.
- h) Conversion of monoculture exotic species plantation in to diversified wood lands.

SIGNIFICANCE OF WILDLIFE HABITAT: Wildlife and wildlife habitat play a vital role in the ecological and biological processes that is essential to life itself. The functioning of the biosphere, and hence the maintenance and enhancement of human life, depends on countless inter actions among plants, animals and micro organisms.

These ecological processes are essential for agriculture, forestry, fisheries and other endeavors necessary to human life. They also help maintain environmental quality by degrading and otherwise removing some pollutants and by preventing waste accumulation. Some of the biological processes in which wild species play a key role are pollination, germination seed dispersal, soil generation, nutrient cycling, predation, habitat maintenance, waste break down and pest control.

Wildlife habitat regardless of whether it is upland or wetland habitat, is significant because of a number of functions it performs to support wildlife. Wildlife needs adequate space and habitat for the following basic life requirements:

5. Safe, undisturbed area for breeding, both on land and in the water.
6. Shelter, which can be underground, in the soil, on the land surface, in water, or in trees and shrubs.
7. Food supply, which may require suitable habitat for the plants and animals that provide the food supply.
8. Migratory routes and
9. Over wintering areas for those species that require seasonal migration for shelter or breeding.

ESTABLISHING FOREST PROTECTION CAMP AND INTENSIVE PATROLLING: In view of better protection and control the original section and beats have been reconstituted and proposals have been sent. Good protection is possible by intensive foot patrolling in groups or teams. Protection will be easy if the field staff stay close to the forest. The forest protection camp should support every section forest officer. Each camp should consist of a group of three people and should be housed with in the sanctuary in appropriately built camp sheds. Permanent staff should join the camp team on shift duties and patrol the beats and section very intensively and regularly. Permanent staff should lead the protection camp staff. Ideal patrol team size should be four people equipped with a weapon and wireless set. Establishing sufficient number of these camps and ensuring that all parts of the sanctuary are patrolled regularly is the most important aspect of protection.

List of places suggested for construction of semi permanent sheds is as under.

Sl. No.	Range	Locations
I	Sacrebyle WLR	Machanamatti Hulihalla Balapanamatti Sacrebylegudda
II	Hanagere WLR	Chinmane Bukkivare Choudikere Choudikatte Alase

III	Shimoga WLR	Haihole Maleshankara Bayalubasavanna Govindapura
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The forest protection camp should be so designed to command a good view of the forest and should be accessible to the wireless network. Every camp should be provided with maps, minimum facilities for cooking, a weapon, a walkie, first aid kit and solar power. Free ration also have to be provided. Protection camps should attend to the problems relating to smuggling of timber, cattle grazing, fire, trekkers, litter, and petty maintenance works etc. Each camp should maintain a daily movement cum observation registers where in all kinds of information pertaining to the flora, fauna and offences should be registered. The proforma for recording daily information.

FIRE MANAGEMENT: Fire plays a very critical role in the habitat management. One of the main factors that have accelerated the degradation of forest cover is the occurrence of the fire which has almost become an annual feature. The grazers, fire wood and NTFP collectors and tourist tend to set fire deliberately or by accident. Smugglers and poachers also set fire to the forest to divert the attention of field staff. Due to the forest fire the natural regeneration is lost and the forest is deprived of rich humus. Wild animals particularly herbivores are the worst sufferers for want of green foliage wild innumerable soil fauna will be destroyed, which play a very important role in maintaining the ecological balance by decomposing and releasing energy form plant and animals. Hence preventive and fire control measures have been given much importance in the habitat development. Considering all these factors the following measures are suggested.

1. Fire line clearance & maintenance.
2. Employing fire watchers during summer.
3. Erection of watch towers.
4. Communication systems like Roads, Wireless sets, Walkie Talkie sets, Telephones etc.

5. Establishing anti poaching squad.
6. Establishing manned checking gates.
7. Supply of guns and ammunitions to the staff.
8. Protection from grazing.

CREATION AND MAINTENANCE OF FIRE BREAKS: Fire breaks should be created along the highway margins, game paths, and areas which are sensitive to fire. The fire breaks should be of 4 meters width. Fallen trees on these lines should be cleared and disposed off. The network of game paths and patrolling tracks act as permanent fire breaks and they should be so maintained by annually clearing the grasses and other weed growth in the month of December. Normally these belts are fire traced. If the work of clearing of fire breaks is under taken in late November or early December, it helps in generating a new flush of grass along the fire breaks. This work is found to be more effective than late clearance and fire tracing.

Fire zones are generally well known and therefore the required fire breaks have been identified and prescribed for annual clearing in the programme of work. The new fire breaks may be identified and created in the vulnerable forest area.

FIRE DETECTION AND CONTROLL: As the forest areas of the sanctuary are plain to gentle sloppy areas, the detection of fire is easy from a hill top. The places ideal for the purpose are:

1. Shimoga Wildlife Range : Shankargudda
2. Sacrebyle Wildlife Range : Sacrebylegudda
3. Hanagare Wildlife Range : Bendematti.

Permanent watch towers should be constructed at these stations. Staff should be positioned on them. These teams should be dispatched in the provided jeep to the scene of fire immediately on message to put out the fire. Road network should be developed in a manner to enable these teams to reach the fire spots as early as possible. The forest protection camp may also be appropriately redeployed to keep a

check on the fires and avail their services. Wild fire spreads rapidly and exponentially. The number of fires can not be reduced substantially in the near future but the extent of fire damage can be brought under control. Fire protection staff and arrangements should be in place by middle of December and can be wound up by the end of April. During exigencies more parties can be engaged and hired vehicles can be used.

FIRE MONITORING AND REPORTING SYSTEM: Incidents of fire should be reported to the head quarters on wireless immediately. The Range Forest Officer should submit daily report of fire occurrence in the following formats to the division office from January to end of April every year:

DAILY FIRE REPORT

Range:

Date:

Sl. No.	Forest	Time of detection	Time of attendance	Summary of damage to forest

Signature of Range Forest Officer

The Range Forest Officer should record the fire occurrences in the range map for future references.

PROTECTION AGAINST GRAZING: Grazing is directly related to the human habitations inside the sanctuary. So long the enclosures exist and people are allowed to continue in their traditional agricultural profession, rearing of cattle is necessary to support their lively hoods. A sustained campaign of bringing awareness among the inhabitants may slightly reduce the intensity of these activities but total control will only be possible when all the people are rehabilitated.

PROTECTION AGAINST ENCROACHMENT: The majority of the people who are living inside the sanctuary are the persons displaced from Sagar taluk after the construction of Linganamakki reservoir. These people migrated during the year 1960 to 1965. During that time some of the areas of the state forests have been cleared and handed over for the purpose of rehabilitation. Immediate action to be taken to take out the old Government notifications and the area as per the notification has to be identified on the ground. So that people living in the sanctuary are living in the released areas or living outside the released forest land may be ascertained.

PROTECTION FROM COMMUNICABLE DISEASES: Although there was no recorded of epidemics to the wild animals, abundant precaution is necessary as any incident could wipe out the entire ungulate population. Immunization of cattle within the sanctuary as well as outside up to a radius of 3 Kms should be regularly done at Government cost. It is a permanent solution to the threat.

POACHING: Poaching of small game such as Indian hare, Barking deer is rather difficult to detect. Poaching of big game is not found. However vigil has to be maintained.

COMMUNICATION FACILITIES - WIRELESS NETWORK: For effective protection against theft, fire, grazing etc., good communication facilities are necessary. An efficient wireless network is already functional. Due to the addition to existing staff strength, sufficient number of walkie talkies given to the front line staff. All the wireless equipments including the repeater station should be toned up and kept in good working condition round the year and especially during the fire season.

DEVELOPMENT AND MAINTENANCE OF PATROLLING TRACK NETWORK: A good road network is necessary to provide access to the remote areas. The existing road network has been developed keeping this aspect in mind. However there are still certain shortcomings and all problematic areas are not accessible. Therefore new patrolling tracks should be planned, aligned carefully and developed at the earliest.

Wherever necessary bridges and culverts should be built. The roads so formed should be inter connected.

BOUNDARY AND “D” LINE MAINTENANCE: External boundaries have to be maintained clearly and regularly. Demarcation pillars engraved with sanctuary title should be planted all along the boundaries. Maintenance of internal boundaries especially around the enclosures is also necessary so long the rehabilitation programme is not completed. Rationalization of the boundary and re-issue of notification is to be completed.

PUBLIC EDUCATION: People who are living inside the sanctuary are to be educated about the long term consequences of fire especially in terms of loss of soft palatable grasses and poor water retention. So a sustained campaign of public education through hand bills, films, posters, display boards etc., should be taken up. Serious efforts are also necessary to try and convince them to reduce the cattle numbers. Effective steps should be taken to prevent cattle grazing inside the sanctuary. It should form a part of the duties of the forest protection camps to dry away the cattle if and when found in the sanctuary.

SUMMARY: Protection is an important aspect until the rehabilitation of all inhabitants is completed and must be taken up with all seriousness. Sighting of animals is a direct indication of the degree of protection given. The present level of animal density is too low and unless ungulates are well protected, the possibility of carnivores going up in number is remote. As such the carnivore density is low and if ecological balance is to be restored, protection should be treated as a fundamental strategy in the over all management of the sanctuary.

8.5: HABITAT MANAGEMENT: This practice is applied to land with existing tree cover or land capable of growing trees or other woody vegetation to provide multiple resource benefits. The purpose of this is to establish or improve habitat for native species of wildlife and plants. The sanctuary as a habitat is in good prospect but it is under

tremendous pressures from different sources. The fundamental principals under lining habitat management are,

1. Return to land to the natural flora and fauna (removal of exotics)
2. Reduce human interferences.
3. Establishment of native trees are shrubs, seed producing perennial grasses, legumes and other specified small gains.
4. Seeding and propagation of threatened and endangered plants.
5. Vegetation management to control undesirable species and improve habitat quality.
6. Creation of wildlife corridors.
7. Water resource development.
8. Minor water control structure.

RETRUN OF LANDS TO NATURAL FLORA AND FAUNA: Extensive plantations of exotic species blot in the sanctuary. By suppressing the grasses they have displaced the local flora and consequently the fauna. There by the cattle are forced to migrate further interior and accordingly there is a shift in the feeding and breeding ground of the wild fauna. To support the cattle, people also go deeper in the forest and kindle fires. Exotics have no ecological role. Therefore all the exotic plants are to be removed.

TEAK AND OTHER PLANTATIONS: There are many teak plantations existing inside the sanctuary. Thinning of teak poles has to be carried out. Dibbling of fruit yielding species may enrich these sites. Further the exotics should be removed and seed dibbling, planting of bamboos and other naturally aided plantations can be taken up.

NATURAL VEGETATION MANAGEMENT: The objective is to maintain pristine conditions with in the sanctuary to capture the full spectrum of biodiversity and also unleash the full watershed potential.

SOIL AND WATER CONSERVATION: Soil is a non-renewable resource. Any disturbance, of any magnitude is bound to affect the nutrient cycling. The nutrient gets washed down and replenishments will be extremely difficult to regenerate. It is necessary to take up construction of gully checks not only to retain the soil but also to improve the water storage capacity. The gully checks should be constructed with the available rubble stone. Soil and water conservation measures are a part of routine habitat improvement programme.

WATER RESOURCES DEVELOPMENT: Water is a crucial factor in wildlife management. By creating or closing water sources use of habitats by animals can be regulated. Water management involves locating areas without surface water during the pinch period and providing water supply. This should be best done by conserving natural water sources. There are many ponds and small tanks in the sanctuary, which should be identified and renovated. Rising of bunds, well designed and strong spill ways, desilting of tanks, creation of new water holes etc., can be thought of. Natural springs and seepage points can be developed for better and more water storage. Marsh lands of any size and nature, should be preserved. Water resources should be used for drawing wild animals away from water near human settlements and towards tourists spot. A network of water holes should be developed such that animals need not have to travel more than 3-4 Kms for water. Around water holes salt licks, either of salt blocks or common salt, spread on raised loose soil bed should be provided.

During rainy season water is wasted as runoff causing serious soil erosion. Hence in order to conserve soil and water, check dams, gully checks have to be constructed all along gullies and nalas, at regular intervals. Rubble stone check dam will serve the purpose. All such conservation works must start from top and proceed down the slopes to be effective.

PROVISION OF SALT LICKS: It has been found that artificial salt licks are very well utilized. So we can continue to renew the existing salt licks annually and also provide for more if necessary. On an average, 3 or 4 salt licks can be provided with in the vicinity of

each pond. Over all 100 to 200 salt licks per range fairly well distributed would be sufficient to meet the requirement of animals.

SUMMARY: Except removal of exotic plantation, other items of habitat development have been given greater thrust. However works would be necessary to achieve the objectives of improving the water shed efficiency. Scope is big but quantum jumps will not be possible because of the complex environmental and ecological issues involved. Therefore habitat restoration programme should proceed steadily over a long time frame.

8.6: Monitoring and evaluation: Impact of the eco-development should be monitor closely by observing the activities proposed under eco-development.

CHAPTER – 9
RESEARCH, MONITORING AND TRAINING

9.1: Research and monitoring: There is no separate research section in the wildlife wing. Academic and research institutions conduct most of the research work with their own funding. Usually the research work is isolated and unconcerned with the management issues of the PA. Findings of the research work are not made available. Considering the high bio diversity and a conglomeration of agencies working on different subjects, there is a need to monitor research work very closely at the PA level itself.

9.2: Training: Training the officers and the staff of the department is indispensable and necessary for the officers for orientation of the project. The form of training should be in the field as well as in the class room.

9.2.1: On the job training: On the job training may be given to the officers and staff of the department to know the various aspects of forestry, the application of laws and regulations, post mortem of wild animal carcasses and other wild life health care matters, wild life evidences, collection of biological material and their interpretation.

9.2.2: Formal training courses: The formal training to the staff of protected area is going to help in crucial. Instituting and adopting a continuous learning process. The following trainings will be taken up during the plan period.

1. Field research techniques.
2. Weapon handling and maintenance.
3. Modern fire fighting.
4. Conducting census.
5. Map reading.

9.2.3: Establishing a learning centre: Any training activity is not an end itself. Besides its specific inputs, the role of training is to launch support to maintain the process of learning with objectivity, ultimately leading to the enhancement of management capability.

CHAPTER – 10
ORGANIZATION AND ADMINISTRATION

10.1: Structure and responsibilities: At present management and administrative control of Shettihalli wildlife sanctuary is done by Shimoga wildlife division, with head quarters at Shimoga. Parts of areas in Sacrebyle and Hanagere are yet to handed over by the regular division, Shimoga. The existing staff pattern is as follows.

A. Staff pattern of Shettihalli wildlife sanctuary:

Sl. No.	Staff	Sanctioned posts	Existing post	Vacant
1	Deputy Conservator of Forests	1	1	-
2	Asst. Conservator of Forest s	1	1	-
3	Range Forest Officers	3	3	-
4	Superintendent	1	1	-
5	First Division Assistant	3	3	-
6	Second Division Assistant	2	2	-
7	Junior Engineer	1	1	-
9	Surveyor	1	1	-
10	Foresters	12	12	-
11	Forest guards	41	31	10
12	Forest watchers	10	10	-
13	Jamedars	2	2	-
14	Mahouts	23	9	9
15	Kawadies	18	14	4

16	Drivers	1	1	-
20	Peons	4	4	-
21	Cooks	2	2	-
23	M.R.	18	18	-

B. Details of Sections, Beats:

Sl. No.	Name of the Range	Sections	Beats
1	Shimoga WLR	Anesara	Anesara
			Kalkoppa
			Maleshankara
		Shettihalli (Anupinakatte)	Puradal-I
			Puradal-II
			Haihole-I
			Haihole-II
			Shettihalli – I
			Shettihalli-II
		Lion Safari	
		Protection cum Thinning unit staff	
2	Hanagere WLR	Hanagere	Hanagere
			Maskani
			Dobyle
			Belluru
			Kombinakai
			Kalligadde
			Gubbiga
			Basavanagadde
		Sirigere	Kalkoppa
			Chinmane

		Arasalu	Choudikere
			Harohithlu
			Baruve
		Reppenpete	Mugudthi
			Yogimalali
			Garathikere
		Protection cum thinning unit staff	
3	Sacrebyle WLR	Sacrebyle	Ballarikere
			Mathigundi
			Talale
			Ramenkoppa-II
			Sacrebyle (Sacrebyle-II)
		Protection cum thinning unit staff 1. Forester, 1 Guard.	

Reorganization of Sections and Beats have been prepared and submitted to the higher officers for sanction accordingly.

10.2: Staff amenities: All the officers are provided with office and residential accommodation. There is a need to construct a house for the stay of Asst. Conservator of Forests, Wildlife Division, and Shimoga. Every officer has been provided with a Jeep. Majority of the subordinates are also provided official accommodation. In view of the reorganization and posting of more number of staff, some more quarters are required. Antipoaching camps are usually run in temporary / semi permanent sheds. The patrolling tracks have been provided with gates in sensitive areas. No patrolling track is allowed to be kept in open condition. There are four number of permanent watch tower erected in different parts of the sanctuary.

A basic network of tracks have been developed utilizing and inter connecting the existing village roads. All these village roads are meant to be patrolling track cum permanent fire breaks. List of patrolling tracks with in the sanctuary furnished here under.

List of patrolling tracks:

Sl. No.	Range	From	To	Total length (in Kms.)
I	Shimoga WLR	Anupinkatte	Shettihalli	20.00
		Shettihalli	Maleshankara	12.00
		Haihole camp	Haihole	5.00
		Haihole camp	Manjarikoppa	9.00
		Safari	Narasipura Tank	4.00
		Shettihalli	Kerehalli via Kalkoppa	11.00
II	Hanagere WLR	Seegehalla	Bellur	4.00
		Hanagere Road	Ranibavi	3.00
		Hanagere Road	Bendematti watch tower	3.00
		Sirigere IB	Bellur	5.00
		Karakuchi	Naimuttadahalla	3.50
		Naimuttahagall		
		Check dam No.1	Hebballi	4.00
III	Sacrebyle WLR	Sacrebyle	Basavapura camp	12.00
		Keegadi	Basavapura camp	12.00

This network , however does not provide access to all parts of the sanctuary. There is a need to form fresh patrolling track to access each and every corner of the sanctuary.

WIRELESS NETWORK AND TELEPHONES: The sanctuary is provided with a good wireless network. There are five static wireless sets at range head quarters and Deputy Conservator of Forests office Shimoga and five mobile sets in the vehicles. And there are 39 No of walkie talkies distributed among officers, foresters and forest guards.

There is one repeaters station established at Bendimatti of Hanagere wildlife range. Recently the frequency upgraded to high band and all the static, mobile and walkie talkies are replaced with new ones. The repeater station is powered by solar panels. The system works very efficiently and message emanating from any source is circulated over the entire network. The system has proved very helpful especially in fire season and in protection.

The divisional office and all the range forest offices are connected by telephones.

FOREST PROTECTION CAMP: There are 3 forest protection camps which are working as permanent / temporary establishment, at different locations inside the sanctuary. Local youths are employed in these camps along with the permanent staff. But working of these camps is not yet systematized. They are used as support structures to makeup the staff shortages. In addition to the three forest protection camp recently 9 more antipoaching camps were established in sensitive zones of the sanctuary. They are help full in protection, fire control, anti poaching etc.

CHAPTER – 11

THE BUDGET

11.1: The plan budget: The budgetary provisions made available for the development of the sanctuary so far is very meager with most of the funds being spent mainly on the maintenance of works already executed. More funds may be provided as per the financial chart for the better management of the sanctuary. The details of budgetary requirements are discussed in the future formats.

11.2. Programme of works: A detailed programme of work indicating the year, location, quantity of work and their financial implications is furnished . . The programme broadly divided into six categories as under.

- Regular maintenance works.
- Protection works.
- Habitat protection and management.
- Eco development.
- Eco tourism.
- Infrastructure.

This classification aims at prioritizing different items of work in the order of their importance to the management of the sanctuary. Whenever there is budget constraint, the annual maintenance works should be accorded priority. Programmes like eco development of the buffer areas and rehabilitation of inhabitants require huge commitment of funds and therefore may not be possible under the routine annual programmes. They should be packaged separately as independent projects and sourced appropriately.

ANNEXURE – I
THE LIST OF APPENDICES

Sl. No.	Title
1.	Notification of the sanctuary (Facsimile)
2.	Constitution extent of the protected area.
3.	The existing pattern of staff by hierarchical levels and scales of pay.
4.	List of mammals found in the division
5.	List of birds found in the division
6.	List of reptiles found in the division
7.	List amphibians found in the division
8.	List of fishes found in the division
9.	List of species found in the division
10.	List of vehicles.
11.	List of cattle population in the sanctuary
12.	List of existing buildings
13.	List of plantations.
14.	List of enclosures in sanctuary.
15.	List of villages included in the sanctuary
16.	List of teak plantations to be taken up for silvicultural thinning in this division during 2005-06 to 2014-15

1. Notification of the sanctuary.**GOVERNMENT OF KARNATAKA**

No., AFD 47 FWL 74

Karnataka Government Secretariat,
Vidhana Soudha,
Bangalore dated: 23.11.1974.**NOTIFICATION**

Where the Government of Karnataka considers that it is desirable to declare the area, the situation and limits of which are specified in the schedule below, to be a sanctuary as it is of adequate ecological, faunal, floral, geomorphologic, natural or zoological significance for the purpose of protecting, propagating to developing wildlife or its environment;

Now, therefore, in exercise of the power conferred by section 18 of the wildlife (protection) Act, 1972 (Central Act., 53 of 1972), the Government of Karnataka hereby declares there are, situations and times and limits of which are specified in the schedule below to be sanctuary called as “**SHETTIHALLI WILDLIFE SANCTUARY**”

SCHEDULE

Name of the District	:	Shimoga
Area	:	97,647.17 Acre or 395.60 Sq. Kms.
Boundary Description	:	

NIORTH: From Ayanur along the southern portion of Ayanur-Hosanagar road upto Rippenpet running from East to West.

WEST: From Rippenpet along eastern portion of Rippenpet Thirthahalli road including Mugudthi SF up to Konandur, running North to South.

SOUTH : From Konadur along the boundaries of Rippenpet, Hanagere and Thirthihalli Range Forest upto Mandagadde running from west to east.

SOUTH-EAST: From Mandagadde along the western portion of Shimoga-Mangalore road upto Shimoga, running from South to North-East.

NORTH – ESAT : Starting from Shimoga, the line runs along the western portion of B.H. Road up to Ayanur.

**By order and in the name of
Government of Karnataka,**

**Sd/-
(S.Shyam Sunder)
Special officer and Ex-officio
Deputy Secretary to Government,
Food and Forest Department.**

Letter No. AFD-47-WML-74 dated: 25th January 1977 of the Commissioner and Secretary to Government, Food and forest, Vidhana Soudha, Bangalore to the Chief Conservator of Forests, (General), Bangalore.

Sub: Shettihalli Wildlife Sanctuary (Shimoga Dist. Constitution of Notification under Sec. 18 of the wildlife (Protection) Act., 1972 Action confirmed.

Ref: 1. Government notification No. AFD 47 FWL 74 dated: 23.11.1974
2. Correspondence ending with letter No. M 6 FOR 28/74-75 dated: 04.02.1976 from the Deputy Commissioner, Shimoga.

In the circumstances reported by the Deputy Commissioner, Shimoga in his letter dated 04.02.1976 cited (2) above (copy enclosed). The constitution of the Shettihalli Wildlife Sanctuary as notified under Sec. (18) of the Wildlife (protection) Act., 1972 as per Government notification dated: 23.11.1974 cited (1) stands confirmed.

Sd/-
Under Secretary to Government,
Food and Forest Department.

2. Constitution extent of the protected area.

Sl. No.	Name of the district	Name of the Forest SF / RF	Block & Compartment No.	Extent (in Ha)
1	Shimoga	Hanagere RF	-	6755.00
2	"	Kudi RF	-	2730.00
3	"	Harohithlu RF	-	1795.00
4	"	Masaruru RF (Part)	VII 1 , 2, 3, 6, 7, 8, 9.	1060.00
5	"	Kumadhathi RF	-	3817.00
6	"	Baruve RF (Part)	VII 12 to 14	807.00
7	"	Mugudthi RF (Part)	-	194.00
8	"	Anesara RF	-	1819.00
9	"	Puradal RF	-	2591.00
10	"	Shankar RF	-	9330.00
11	"	Sacrebyle RF	-	3886.00
12	"	Arakere MF	-	368.00
13	"	Anupinakatte MF	-	497.00
14	"	Anupinakatte pltn.	-	87.00
15	"	Basavapure MF	XIII 1	317.00
16	"	Bedankalmatti MF	XIII 2,3.	693.00
17	"	Keegadi MF	XIII 20	144.00
18	"	Talale MF	XIV 13	242.00
19	"	Kullunde MF	XIV 14	204.00
20	"	Halasavala MF	XIV 10	325.00
21	"	Kanagalakoppa MF	XIV 11	150.00
22	"	Mandagadde MF	XIV 8	223.00
23	"	Bommenahalli (Part)	XIV 15	50.00

24	"	Sacrebyle Pltn (part)	-	100.00
25	"	Mandagatta MF	-	942.00
26	"	Kittanduru MF	VIII 23	294.00
27	"	Bide MF	VIII 24	209.00
28	"	Muniyur MF	VIII 25	332.00
			TOTAL:-	39560.00

3. Staff pattern of Shettihalli wildlife sanctuary:

Sl. No.	Staff	Sanctioned posts	Existing post	Vacant	Scale of pay (in Rs.)
1	Deputy Conservator of Forests	1	1	-	9580-14200
2	Asst. Conservator of Forests	1	1	-	7400-13120
3	Range Forest Officers	3	3	-	5575-10620
4	Superintendent	1	1	-	5200-9580
5	First Division Assistant	3	3	-	3850-7500
6	Second Division Assistant	2	2	-	3000-5450
7	Junior Engineer	1	1	-	4575-8400
9	Surveyor	1	1	-	3300-6300
10	Foresters	12	12	-	3300-6300
11	Forest guards	41	31	10	3000-5450
12	Forest watchers	10	10	-	2600-4350
13	Jamedars	2	2	-	3300-6300
14	Mahouts	23	9	9	3000-5450
15	Kawadies	18	14	4	2500-3850
16	Drivers	1	1	-	3000-5450
20	Peons	4	4	-	2600-4350
21	Cooks	2	2	-	2500-3850
23	M.R.	18	18	-	80.22/day

4. List of mammals found in the division,

Sl. No.	Latin names	Kannada name	Common names
1	<i>Macaca sinica</i> (Linn)	Kapi	The Bonnet Monkey
2	<i>Pithecus entellus</i> (Blyth)	Musia	Hanuman Monkey
3	<i>Loris lydekkerianus</i> (Car)	Kadupapa	Mysore Slender Loris
4	<i>Felis affinis</i> (Linn)	Huli, Dodhull, Pattehuli	The Tiger
5	<i>Felis affinis</i> (Grey)	Kadubekku	The Jungle Cat
6	<i>Acinonyx venaticus</i>	Kiruba	The hunting Leopard or Cheetah
7	<i>Mangos Mango mungo</i> (Gernl)	Mungasi	The indian mongoose
8	<i>Canis indicus</i> (Hodgs)	Nari	The Indian Jackal
9	<i>Lutra lutra</i> (Linn)	Nirunayi	The common Otter
10	<i>Melurus ursinus</i> (Shaw)	Karadi	The Sloth Bear
11	<i>Tragullus meminna</i> (Erxl)	-	The Indian chevrothin, Mouse Deer
12	<i>Pteropus giganteus</i>	-	The Indian flying Fox
13	<i>Lyroderma lyra lyra</i> (Geoff)	-	The vampire Bat
14	<i>Petaurista philippensis</i> (Elli)	Harubekku	The South Indian flying Squirrel
15	<i>Seiurus Malabaricus</i> (Linn)	Kendalilu	The red squirrel, the Malabar squirrel
16	<i>Seiurus</i> (H.Sm.)	Kati, Kadukona	The Gaur, The Bison
17	<i>Muntiacus vaginalis</i> (boded)	Caducei	The Barking deer
18	<i>Rosa Uni-colour</i> (Bees)	Kara, Cadaver	The sandbur
19	<i>Axis</i>	Sarong	The spotted Deer
20	<i>Sues cryostats</i> (Wang)	Kaduhandi	The Indian Wild Boar
21	<i>Hystrix leucra</i> (Sykes)	Mullandi	The Indian Porcupine
22	<i>Manis crassicaudata</i> (Geoff)	Chipuhandi	The Indian Pangolin

5. List of birds found in the division,

Sl. No.	Latin names	Kannada name	Common names
1	<i>Corvus macrithyncus</i> (Eagl)	Kage	The Jungle Crow
2	<i>Palaeornis torquatus</i> (Bodd)	Gill, Gini	The Common Indian Parrot
3	<i>Neopharon ginginianus</i> (Lath)	Haddu	The vulture
4	<i>Harasser indus</i> (Bodd)	Garuda	The Bromine kite
5	<i>Crocopus chlorogaster</i> (Bluth)	Biliva	The Green Pigeon
6	<i>Columba intemedia</i> (Strikill)	Kadupariala	The Blue rock pigeon
7	<i>Pavo cristatus</i> (Linn)	Navilu	The Pen fowl
8	<i>Gallus sonnerati</i> (Temm)	Kadukoli	The gray jungle fowl
9	<i>Gallooerdix spadicea</i> (Gu)	Chittagoli	The red Sour fowl
10	<i>Francolinus pondicerians</i> (Gm)	Gawjalakki	The Gray partridge
11	<i>Sarcidiomis melanonotus</i> (Penn)	Nirukoli	The Comb Duck
12	<i>Dendrocyena javanica</i> (Horsf)		The Whistling teal
13	<i>Nettium crecea</i> (Linn)		The Common Teal
14	<i>Gallus banakiva murgi</i>	Kempu kadukoli	The Red Jungle Fowl
15	<i>Dendrocittarufa</i>	Matapakshi	The Tree pie
16	<i>Dumetia hyperithra</i>	Chirapakshi	The Rufous-Hellied Babbler
17	<i>Otocompusa jocose fascucaudata</i>	Kembumise bulbul	The Southern Red Whiskered Bul Bul.
18	<i>Saxicolodes cambaiensis</i>	Buda balatuti	The Indian Robin
19	<i>Pienonotus luteolus</i>	Bul bul	The white browed Bul bul
20	<i>Tehitreia paradise</i>	Rajahakki	The paradise flycather
21	<i>Cyornis tickellioe</i>	Nili-Rajahakki	Tickelle Blue flycatcher.
22	<i>Tephrodornis pondiceriana</i>	Bharadwaja	The common woodshrike
23	<i>Pericocotus speciosus</i>	Chtrapakshi	The Scarlet minivet
24	<i>Dicururus macrocerus</i>	Kare bharadwaja	The king Crow
25	<i>Dissemurus sctorius</i>	Bharadwaja	The Rocket tailed drongo
26	<i>Orthotomus sctoricus</i>	Chipaganahakki	The Tailor Bird
27	<i>Acredotheres trestis</i>	Goravantehakki	The Common myna
28	<i>Gymnoris xanthocolis</i>	Kodagubachi	The Yellow throated Sparrow
29	<i>Hirindo rustica</i>	Bannakki	The Common Sallow
30	<i>Hirundo filifera</i>	Tantihanakki	Wire tailed Swallow
31	<i>Dicoem erythrorhyncum</i>		Tikells Flower peacker

32	<i>Leopicus blanfordii</i>	Marakatiga	Yellow fringed pied wood pecker
33	<i>Centropus parroti</i>	Kempukage, Kembutha	The Southern crow pheasant
34	<i>Alcedo benghalensis</i>		The Common kin fisher
35	<i>Sarcogyps calvus</i>	Ranahaddu	The Black Vulture
36	<i>Astur dussumier</i>	Shikara	The Indian shikhara
37	<i>Oenopopelia transquebarica</i>	Galava	The red turtle dove
38	<i>Amauromis phoenicurus</i>	Nirakoli	The white breasted water hen
39	<i>Bulbulcus coromandus</i>		The cattle egret
40	<i>Nettion crecca</i>		The common teal
41	<i>Demdrocygna javanica</i>	Nirubathu	The common whistling teal
42	<i>Nyroca rufa</i>	Batu	The white Bye

6. List of reptiles.

Sl. No.	Latin names	Kannada name	Common names
1	<i>Crocodilus palustris</i> (Less)	Mosale	The Mugger
2	<i>Testudo elegans</i> (Schoep)	Ame	The land Tortoise
3	<i>Gonotodes mysorensis</i> (Gord)	Uda	The Monitor lizard
4	<i>Calotes versicolor</i> (Dand)	Hentegooda	
5	<i>Chameleon calcaratus</i> (Merrem)	Hentegooda	The Chameleon
6	<i>Python molures</i> (Linn)	Hebbau	The Python
7	<i>Tropidnotus stolatus</i> (Linn)	Hasaru Havu	The Common Green Snake
8	<i>Bugarus coeruleus</i> (Schn)	Kattihavu	The Krait
9	<i>Naja tripudians</i> (Merr)	Nagarahavu	The Cobra
10	<i>Vipera resseli</i> (Shaw)	Kalinga Sarpa, Karinagara	Viper King cobra

7. List of Amphibians.

Sl. No.	Latin names	Kannada name	Common names
1	<i>Rana hexadactyla</i> (Less)	Hasarukappe	The Green tank frog
2	<i>Rantigrina</i> (Dand)	Mamadakappe	The Bull frog
3	<i>Rana cyanophlyctis</i> (Schneid)		The Concer frog
4	<i>Rana malabarica</i> (Dum)	Malekappa	The Tree frog
5	<i>Rhacophorus pleuroxtictus</i> (Guth)	Maradakappa	The Tree frog
6	<i>Rana verrucosa kalloula</i> spp	Balemaradakappe	The Plantain frog

8. List of Fishes.

Sl. No.	Latin names	Kannada name	Common names
1	<i>Clarias batrachus</i> (Linn)	Anaminu	The Black cat fish
2	<i>Saccobranchus fossilis</i> (Block)	Chelumiu	Scorpin fish
3	<i>Wallago attu</i> (Bioche)	Baiwminu	
4	<i>Callichrous bimaculatus</i> (Bloche)		Butter fish
5	<i>Pseudotropius atheronoides</i> (Bloche)		Lady fish
6	<i>Macrones vittatus</i> (Block)		Pidler
7	<i>Macrenes aor</i> (H.B.)		
8	<i>Macrenes kelitius</i> (H.B.)		
9	<i>Barbus tor</i> (H.B)	Biliminu, Masheer	
10	<i>Barbus neilli</i> (Day)	Biliminu, Masheer	
11	<i>Barbus sarana</i> (H.B)	Gid pakke	
12	<i>Labeo kontius</i> (Jerd)	Handikurulu	
13	<i>Labeo boga</i> (H.B)	Mada kurlu	
14	<i>Mastocembalus armatus</i> (Lacep)	Havuminu	
15	<i>Ophioce halus puntatus</i> (H.B)	Kacuminu	
16	<i>Oleucopunctatus gachua</i> (H.B)	Korave	

9. List of Species.

Sl. No.	Batanical name	Vernacular name	Family
1	<i>Acacia Arabica</i>	Karjali	Mimoseae
2	<i>Acacia catechu</i>	Kaggali, Khair	Mimoseae
3	<i>Acacia concianna</i>	Seege	Mimoseae
4	<i>Acacia ferruginea</i>	Banni	Mimoseae
5	<i>Acacia intia</i>	Kaduseege	Mimoseae
6	<i>Acacia leucophloea</i>	Bilijali	Mimoseae
7	<i>Acacia suma</i>	Mugalimara	Mimoseae
8	<i>Adhatoda vasica</i>	Adusoge	Acanthaceae
9	<i>Adina cardifolia</i>	Yethyaga	Rubiaceae
10	<i>Aegle marmelos</i>	Bilwapatre	Rutaceae
11	<i>Aglaia roxburghiana</i>	Kempunola	Meliaceae
12	<i>Ailanthus malabarica</i>	Halmaddi	Simaroubaceae
13	<i>Albizzia amara</i>	Sujjalu	Mimoseae
14	<i>Albizzia lebbek</i>	Kallubage	Mimoseae
15	<i>Albizzia odoratissima</i>	Bilwara	Mimoseae
16	<i>Albizzia procera</i>	Bellatte	Mimoseae
17	<i>Alseodaphne semecarpifolia</i>	Mase, Nelthere	Lauraceae
18	<i>Alstonia scholaris</i>	Maddale	Apocynaceae
19	<i>Amoora canarana</i>	Hottenola	Meliaceae
20	<i>Anacardium occidentale</i>	Geruhannu, godambi	Anacardiaceae
21	<i>Anogeissus latifolia</i>	Dindiga	Combretaceae
22	<i>Anthocephalus cadamba</i>	Neerubale	Rubiaceae
23	<i>Antiaris toxicaria</i>	Ajjanapatte	Moraceae
24	<i>Antidesma diandrum</i>	Hulimajjige	Euphorbiaceae
25	<i>Aporosa lindleyana</i>	Sarali, Sali	Euphorbiaceae
26	<i>Arenga wightii</i>	Dadasal	Palmae
27	<i>Artocarpus hirsute</i>	Hebbalasu	Moraceae
28	<i>Aetocarpus integrifolia</i>	Halasu	Moraceae
29	<i>Artocarpus lakoocha</i>	Vatehuli	Moraceae
30	<i>Azadirachta indica</i>	Bevu	Meliaceae
31	<i>Bambusa bambos</i>	Hebbiduru	Graminae
32	<i>Bassia latifolia</i>	Ippe	Sapotaceae
33	<i>Bauhinia malabarica</i>	Mandara	Papilionaceae
34	<i>Bauhinia racemosa</i>	Basavanapada	Caesalpinae
35	<i>Bauhinia vahlii</i>	Basavanapada-balli	Papilionaceae
36	<i>Boswellia cerrata</i>	Bilidhupa, Sambrani	Burseraceae
37	<i>Brindelia retusa</i>	Goje	Euphorbiaceae
38	<i>Buchanania latifolia</i>	Nurukalu	Anacardiaceae
39	<i>Butea monosperma</i>	Muttuga	Papilionaceae
40	<i>Butea superba</i>	Kadavarballi	Papilionaceae
41	<i>Caesalpinia bonducella</i>	Gajjuga	Caesalpiniaceae

42	<i>Caesalpinia minosoides</i>	Kenjiga	Caesalpineae
43	<i>Calamus pseudotenuis</i>	Haludetta	Palmae
44	<i>Calamus rotang</i>	Nagabetta	Palmae
45	<i>Calamus thwaitesii</i>	Handibetta	Palmae
46	<i>Calophyllum inophyllum</i>	Yennehonne	Guttiferae
47	<i>Calophyllum wightianum</i>	Holehonne	Guttigerae
48	<i>Canarium strictum</i>	Kaidhupa	Burseraceae
49	<i>Canthium didymium</i>	Kakkorle, Pyre	Rubiaceae
50	<i>Carallia integerrima</i>	Andipunar	Rhizophoraceae
51	<i>Careya arborea</i>	Kowlu	Myrtaceae
52	<i>Carissa carandus</i>	Kauli	Apocynaceae
53	<i>Caryota urens</i>	Bagani	Palmae
54	<i>Cassia auriculata</i>	Avarike tangadi	Papilionaceae
55	<i>Cassia fistula</i>	Kakke	Caesalpineae
56	<i>Cassia tomentosa</i>	Sillange	Caesalpineae
57	<i>Cedrela toona</i>	Gandhagarige	Meliaceae
58	<i>Celastrus paniculata</i>	Gowri	Celastraceae
59	<i>Celtis australis</i>	Karki	Ulmaceae
60	<i>Chloroxylon swietenia</i>	Massivala, Massibalally	Meliaceae
61	<i>Chukrasia tabularis</i>	Kalagarige	Meliaceae
62	<i>Cinnamomum zeylanicum</i>	Dalchinni	Lauraceae
63	<i>Cipadessa baccifera</i>	Chittumbe	Meliaceae
64	<i>Clematis gourina</i>	Arike Hambu	Ranunculaceae
65	<i>Cochlospermum gossypium</i>	Betta tavare	Bixaceae
66	<i>Colebrookea oppositifolia</i>	Biligurigi	Labiapaeae
67	<i>Cordia macleodii</i>	Hadaga	Boraginaceae
68	<i>Cardia myxa</i>	Challe	Boraginaceae
69	<i>Cryptolepis buchanani</i>	Karebantaballi	Asclepiadaceae
70	<i>Dalbergia latifolia</i>	Beete	Papilionacea
71	<i>Delbergia paniculata</i>	Pachali	Papilionacea
72	<i>Dendrocalamus strictus</i>	Kirubidaru	Graminae
73	<i>Dichrostachys cinerea</i>	Vadivara	Mimoceae
74	<i>Dillinia pentagyna</i>	Kalthege, Kanigalu	Dilleniaceae
75	<i>Dipsyros crumanata</i>	Kantumri	Ebenaceae
76	<i>Dipsyros melanoxyton</i>	Tupra	Ebenaceae
77	<i>Dipsyros montane</i>	Jagalaganti	Ebenaceae
78	<i>Dipsyros paniculate</i>	Karkoomar, Karmaralu	Ebenaceae
79	<i>Dipterocarpus indicus</i>	Dhuma	Dipterocarpaceae
80	<i>Diospyros embryopteris</i>	Kustaraka	Ebenaceae
81	<i>Dodonaea viscosa</i>	Bandanike	Sapindaceae
82	<i>Dysoxylum malabaricum</i>	Devagarige, Devadari	Maliaceae
83	<i>Elaecarpus serratus</i>	Kyasatta	Tiliaceae

84	<i>Elaecarpus tuberculatus</i>	Sttaga, Bhutali	Tiliaceae
85	<i>Eleaeodendron glaucum</i>	Makarathi	Celastraceae
86	<i>Emblica officinalis</i>	Nelli	Euphorbiaceae
87	<i>Erinocarpus nimmonii</i>	Adavi-bende	Tiliaceae
88	<i>Erythrina stricta</i>	Keechakanamara	Papilionaceae
89	<i>Erythrina suberosa</i>	Mullumuttuga, Parivala	Papilionaceae
90	<i>Eugenia zeylanica</i>	Meenangi	Myrtaceae
91	<i>Euonymus dichotomus</i>	Kankutle	Celastraceae
92	<i>Ficus asperrima</i>	Garagatti	Moraceae
93	<i>Ficus benghalensis</i>	Ala	Moraceae
94	<i>Ficus callosa</i>	Nlrvala	Moraceae
95	<i>Ficus glomerata</i>	Atthi	Moraceae
96	<i>Ficus hispida</i>	Nirgaragatti	Moraceae
97	<i>Ficus infectoria</i>	Basari	Moraceae
98	<i>Ficus religiosa</i>	Arali	Moraceae
99	<i>Flacourtia montana</i>	Hannusampige	Bixaceae
100	<i>Flacourtia sepiaria</i>	Miridi	Bixaceae
101	<i>Garcinia cambogia</i>	Kadagolmuraka	Guttigerae
102	<i>Garcinia morelaa</i>	Arasingurgi	Guttigerae
103	<i>Garcinia xanthochimus</i>	Jeerakanahuli	Guttigerae
104	<i>Gardenia gummifera</i>	Bikke	Rubiaceae
105	<i>Gardenia latifolia</i>	Kallagare	Rubiaceae
106	<i>Garuga pinnata</i>	Godda	Burseraceae
107	<i>Givotia rottieriformis</i>	Puliki	Euophorbiaceae
108	<i>Glycosmis pentaphylla</i>	Kadumaralugida	Rutaceae
109	<i>Gmelina arborea</i>	Shivini	Verbenaceae
110	<i>Goochidion zeylanicum</i>	Nirsolle	Euphorbiaceae
111	<i>Grewia tiliaefolia</i>	Tadasalu	Tiliaceae
112	<i>Gymnosparia montana</i>	Thandrasi	Celastraceae
113	<i>Helecteres isore</i>	Cowri	Tiliaceae
114	<i>Hemidesmus Indicus</i>	Sogade beru, Sarasaparilla	Asclepiadaceae
115	<i>Hernada reparia</i>	Holebasari	Euphorbiaceae
116	<i>Holarrhena antidesentrica</i>	Kodachiga, Kodasa	Apocynaceae
117	<i>Holigarna arnottiana</i>	Sanneleholegeru	Arnacardiaceae
118	<i>Holigarna beddomei</i>	Doddeleholegeru	Arnacardiaceae
119	<i>Hopea parviflora</i>	Kiralbogi	Dipterocarpaceae
120	<i>Hopea wightiana</i>	Hyga, Haiga	Dipterocarpaceae
121	<i>Hydnocarpus wightiana</i>	Garudaphala	Bixaceae
122	<i>Hymenodictyon excelsum</i>	Doddathoppe	Rubiaceae
123	<i>Ichnocarpus frutescens</i>	Karigambu	Apocyanaceae
124	<i>Kydia calycina</i>	Bende	Malvaceae
125	<i>Lagrstroemia flosreginae</i>	Holedasavala	Lythraceae
126	<i>Lagrstroemia lanceolata</i>	Nandi	Lythraceae

127	<i>Lagstroemia pareiflora</i>	Channangi	Lythraceae
128	<i>Lannea grandis</i> (Odinia wodier)	Godda	Anacardiaceae
129	<i>Lansium anamallayanum</i>	Chigatamari	Meliaceae
130	<i>Lantana camara</i>	Chandranga	Verbinaceae
131	<i>Lasiosiphon eriocephalus</i>	Mukkandaka	Thymelaeaceae
132	<i>Lettsomia thomsoni</i>	Uganihamby	Convolvulaveae
133	<i>Limonia acidissima</i>	Naibyala	Rutaceae
134	<i>Linociera malabarica</i>	Tagadatti, Akkarakal	Oleaceae
135	<i>Litsea zeylanipa</i>	Sudagenasu	Lauraceae
136	<i>Loranthus longiflorus</i>	Bandanike	Loranthaceae
137	<i>Macaranga roxburghii</i>	Chandrakala	Euphorbiaceae
138	<i>Machilus macrantha</i>	Gulamavu	Lauraceae
139	<i>Mallotus philippensis</i>	Bannadamara	Euphorbiaceae
140	<i>Mamena sirige</i>	Suragi	Guttiferae
141	<i>Mangifera Indica</i>	Mavu	Anacardiaceae
142	<i>Melia camposita</i> (M dubia)	Hebbevu	Meliaceae
143	<i>Mellia</i> spp	Vishapuri	Meliaceae
144	<i>Memecylon adule</i>	Arichapla, Adcheri	Melastomaceae
145	<i>Mesuaferrea</i>	Nagasampige	Guttiferae
146	<i>Michelia champaca</i>	Sampige	Mangoliaceae
147	<i>Mimosa pudica</i>	Muttideremuni	Mymoseae
148	<i>Mithragyna parvifolia</i>	Kadavala, Kalam	Rubiceae
149	<i>Mucuna prurita</i>	Nasaguni	Papilionaceae
150	<i>Murraya koenigii</i>	Karibevu	Rutaceae
151	<i>Myristica malabarica</i>	Ramapatre	Myristicaceae
152	<i>Nephilium longana</i>	Sannelekendal	Sapindaceae
153	<i>Ochlandra travancorica</i>	Vate	Graminae
154	<i>Ochna squarrosa</i>	Madli	Ochnaceae
155	<i>Olea dioica</i>	Sadle	Oleaceae
156	<i>Ougeinia delbergioides</i>	Bettadahonne, Krimutthal	Papilionaceae
157	<i>Oxytenanthera stocksii</i>	Pannangi	Graminae
158	<i>Palaquium ellipticum</i>	Hadasale	Sapotaceae
159	<i>Pandanus odoratissimus</i>	Kyadige, Kedige	Pandanaceae
160	<i>Pavetta indica</i>	Pavate	Rubiceae
161	<i>Phoenix</i> spp.	Karichalu	Plamae
162	<i>Phoenix sylvestris</i>	Ichalu	Plamae
163	<i>Plumeria acutifolia</i>	Devakanigal	Apocyanaceae
164	<i>Poeciloneuron indicum</i>	Balagi	Trernstroemiaceae
165	<i>Polyalthia fragrans</i>	Maragowri	Anonaceae
166	<i>Pongamia pinnata</i>	Honge	Papilionaceae
167	<i>Premna tomentosa</i>	Eji, Narave	Verbenaceae
168	<i>Psychotria flavida</i>	Vatemadikay, Kankalli	Rubiaceae

169	<i>Pterocarpus marsupium</i>	Honne	Papilionaceae
170	<i>Pterospermum suberifolium</i>	Sownamara	Sterculiaceae
171	<i>Putrangiva roxburghii</i>	Putranjeeva	Euophbiaceae
172	<i>Randia dumentorum</i>	Kare	Rubiaceae
173	<i>Saccopetalum tomentosum</i>	Ubalu	Anonaceae
174	<i>Salix tetrasperma</i>	Niranji	Salicaceae
175	<i>Santalum album</i>	Sri Gandha	Santalaceae
176	<i>Sapindus emarginatus</i>	Antavala	Sapindaeae
177	<i>Saraca indicaa</i>	Asoka	Caesalpiniae
178	<i>Schleichera oleosa</i>	Kendala, Kusum, Sagade	Sapindaeae
179	<i>Schredera swietenioides</i>	Gante	Oleaceae
180	<i>Semecarpus anacardium</i>	Kadugeru	Anacardriaceae
181	<i>Shorea talura</i>	Jalari, Jala, Jalgiri	Dipterocarpaceae
182	<i>Smilax prolifera</i>	Karinarigedde	Liliaceae
183	<i>Soymida febrifuga</i>	Some	Meliaceae
184	<i>Spatholobus roxburghii</i>	Kadavarehamabu	Papilionaceae
185	<i>Spondias mangifera</i>	Amate	Anacardiaceae
186	<i>Sterculia foetida</i>	Peenari	Sterculiaceae
187	<i>Sterculia guttata</i>	Hulithoradu, Hulimara	Sterculiaceae
188	<i>Streculia urens</i>	Savige	Sterculiaceae
189	<i>Streculia villosa</i>	Bildale	Sterculiaceae
190	<i>Stereospermum personatum</i>	Kaladri	Bignoniaceae
191	<i>Stereospermum xylocarpum</i>	Genasu	Bignoniaceae
192	<i>Stereospermum spp.</i>	Kadunugge	Bignoniaceae
193	<i>Stereospermum suaveolens</i>	Padri	Bignoniaceae
194	<i>Strobilanthus spp.</i>	Gurgi	Acanthaceae
195	<i>Strychnos nuxvomica</i>	Nanjanakoradu, Kasaraka	Loganiaceae
196	<i>Strychnos potatorum</i>	Chilla	Loganiaceae
197	<i>Synplocos spicata</i>	Chunga, Buthagani	Symplocaceae
198	<i>Syzygium cumini</i>	Neralu	Myrtaceae
199	<i>Tabermaemontana heyneana</i>	Madlemara, madarasa	Apocynaceae
200	<i>Tectona grandis</i>	Saguvani	Verbenaceae
201	<i>Terminalia arjuna</i>	Bilimathi, Holemathi	Combrataceae
202	<i>Terminalia bellerica</i>	Tare	Combrataceae
203	<i>Terminalia chebula</i>	Alale	Combrataceae
204	<i>Terminalia tomentosa</i>	Mathi	Combrataceae
205	<i>Toddalia aculeaca</i>	Kadumenasu	Rutaceae
206	<i>Trema orientalis</i>	Gorakalu, Indian charcoal tree	Ulmaceae
207	<i>Trema nudiflora</i>	Kadukumbala	Euphorbiaceae

208	Urena lobata	Kogamani	Malvaceae
209	Vitex alata	Nirnaviladi	Verbenaceae
210	Vitex altissima	Naviladi	Verbenaceae
211	Vitex negundo	Lakkigida	Verbenaceae
212	Vitis quadrangularis	Perande	Vitaceae
213	Wendlandia exerta	Kansurgi	Rubiaceae
214	Zanthoxylum rhetsa	Jummanamara	Rutaceae
215	Zizyphus jujube	Elachi	Rhamanaceae
216	Zizyphus oenoplia	Sodli (paragi)	Rhamanaceae
217	Zizyphus regosa	Bili-mulluhannu	Rhamanaceae
218	Zizyphus xylopyrus	Chatte, ghotte	Rhamanaceae

10. List of Vehicles.

Sl. No.	Vehicle No.	Model	
1	KA-01-G-1611	Ambasidar Car	Deputy Conservator of Forests
2	KA-01-G-2884	Maruthi Gypsi	Asst. Conservator of Forests.
3	KA-14-G-518	Mahindra Jeep	Range Forest Officer, Hanagaere Wildlife Range, Sirigere
4	KA-14-G-0008	Tata mini truck	Range Forest Officer, Shimoga Wildlife Range, Shimoga
5	KA-20-G-5004	Tata mini truck	Range Forest Officer, Sacrebyle Wildlife Range, Gajanuru
6	KA-18-G-445	Mahinda Jeep	Range Forest Officer, Sacrebyle Wildlife Range, Gajanuru
7	KA-01-G-86	Mahindra Utility	Range Forest Officer, Shimoga Wildlife Range, Shimoga

11. CATTLE POPULATION :

Sl. No.	Name of the village	Cattle	Buffelow	Sheep	Goat	Pig
<u>Sacrebyle Wildlife Sanctuary Range (Shimoga Taluk)</u>						
1	Veerapura	40	11	-	-	-
2	Hosahalli	356	85	-	46	-
3	Mulkere	559	61	-	52	-
4	Basavapura	11	26	82	-	-
5	Gajanuru	343	101	15	3	-
6	Sacrebyle	-	-	-	-	-
7	Halehonnapura	199	16	-	-	-
8	Hosur	258	132	-	42	-
9	Raminakoppa	80	76	-	-	-
10	Keegadi	198	55	-	-	-
11	Talale	121	24	-	2	-
<u>Hanagere Wildlife Range (Shimoga Taluk)</u>						
1	Suduru	422	71	-	-	-
2	Adinakottioge	210	11	-	-	-
3	Chikkamathli	292	13	-	87	-
4	Doddamathli	785	41	-	-	-
5	Kudi	686	56	14	2	-
6	Thammadihalli	511	273	7	26	-
7	Sirigere	150	173	-	-	-
8	Thyavarekoppa	585	50	8	55	-
<u>Hanagere Wildlife Range (Thirthalli Taluk)</u>						
1	Kalkurchi	115	31	-	-	-
2	Arenelli	360	56	-	4	-
3	Hanagere	288	56	-	29	-
4	Basavanagadde	255	51	-	-	-
5	Shirinelli	236	65	-	24	-
6	Kombinakai	280	93	-	-	-
7	Alase	226	57	-	13	-
8	Yogimalali	760	183	-	-	-
9	Vatagaru	289	70	-	-	-
10	Aluru	435	161	-	-	-
11	Huttadahalli	341	104	-	-	-
12	Thorebyle	365	134	-	-	-
13	Aklapura	318	91	-	-	-
14	Mallapura	331	182	-	-	-
15	Adinajeddu	54	32	-	-	-
16	Belluru					
17	Maskani					

- 18 Makere
19 Kunaga
20 Sampigehalli
21 Kalkoppa

Hanagere Wildlife Range (Hosanagare Taluk)

1	Belluru	894	116	-	24	-
2	Vadahosahalli	501	140	-	26	-
3	Bidarahalli	997	158	-	10	-
4	Maskani	327	50	-	4	-
5	Dobyle	711	206	5	-	-
6	Gubbiga	798	261	-	53	-
7	Talale	798	193	5	1	-
8	Kalalse	305	165	5	8	-
9	Kagachi	426	101	-	3	-
10	Kalluru	335	117	-	-	-
11	Mugudthi	807	235	-	-	-
12	Kanabanduru	415	123	-	-	-
13	Thammadikoppa	642	155	2	-	-
14	Baruve	428	118	45	128	-
15	Malavalli	266	69	5	4	-
16	Harohithlu	890	83	-	-	-
17	Arasalu	378	38	-	82	-
18	Benvalli	845	137	2	22	-
19	Karegodu	299	78	5	-	-
20	Kolavanka	232	16	-	-	-
21	Saraganajeddu	152	32	-	-	-
22	Basapura	128	98	2	-	-
23	Vatagaru	258	98	-	2	-
24	Siddapura	156	32	-	-	-

Shimoga Wildlife Range (Shimoga Taluk)

1	Shettihalli	382	61	-	-	-
2	Chitrashetihalli	189	35	-	-	-
3	Maleshankara	402	428	-	-	-
4	Manjarikoppa	-	-	-	-	-
5	Ittigehalli	474	127	141	78	-
6	Chennehalli	385	75	18	2	-
7	Puradalu	1329	207	-	177	-
8	Karehalli	-	-	-	-	-
9	Haihole	89	37	-	40	-
10	Hanumanthapura	317	37	-	35	-
11	Anupinakatte	155	86	-	14	-
12	Harakere	135	8	-	-	-
13	Aladevarahosur	48	-	-	-	-
14	Bildevarakoppa	343	32	-	24	-
15	Anesara	44	-	8	9	-

16	Sadalkoppa	424	136	18	149	-
17	Thyavarekoppa	585	50	8	55	-
18	Kalkoppa	78	31	-	-	-

12. List of existing buildings.

I. Officers quarters:

- | | | |
|----------------------------------|---|--------|
| 1. Deputy Conservator of Forests | - | 1 No. |
| 2. Range Forest Officer | - | 3 Nos. |
| a) Shimoga | | |
| b) Sirigere | | |
| c) Gajanru | | |

II. Foresters quarters:

- | | | |
|-------------|---|--------|
| 1. Gajanur | - | 1 No. |
| 2. Hanagere | - | 2 Nos. |
| 3. Shimoga | - | 2 Nos. |

III. Forest Guard quarters:

- | | | |
|--|---|--------|
| 1. Anupinakatte | - | 6 Nos. |
| 2. Sirigere | - | 5 Nos. |
| 3. Mandaghatta | - | 2 Nos. |
| 4. Gajanuru | - | 4 Nos. |
| 5. Talale | - | 2 Nos. |
| 6. Tiger and Lion Safari,
Thyavarekoppa | - | 1 No. |

IV. Watchers quarters:

- | | | |
|--|---|---------|
| 1. Tiger and Lion Safari,
Thyavarekoppa | - | 10 Nos. |
|--|---|---------|

V. Care takers quarters:

- | | | |
|--------------------|---|-------|
| 1. Shettihalli I.B | - | 1 No. |
|--------------------|---|-------|

VI. Office buildings:

- | | | |
|--|---|-------|
| 1. Deputy Conservator of Forests office | - | 1 No. |
| 2. Range Forest Officer, Sacrebyle WLR, Gajanuru | - | 1 No. |
| 3. Range Forest Officer, Shimoga WLR, Anupinakatte | - | 1 No. |
| 4. Range Forest Officer, Hanagere WLR, Sirigere | - | 1 No. |

VII.Others buildings:

1. Inspection bungalow	-	1 No.
2. Bellur I.B.	-	1 No.
3. Store room, Sacrebyle	-	1 No.
4. Checking gate, Gajanru	-	1 No.
5. Store room, Gajanru	-	1 No.
6. Store room, Basavapura-	-	1 No.

Tiger and Lion Safari, Thyavarekoppa

1. Canteen building	-	1 No.
2. Van shed	-	1 No.
3. Lion cage	-	1 No.
4. Tiger cage	-	1 No.
5. Deer cage	-	1 No.
6. Panther cage	-	1 No.
7. Hyena cage	-	1 No.
8. Jackle cage	-	1 No.
9. Peacock cage	-	1 No.
10. Crocodile cage	-	1 No.
11. Pump house	-	3 Nos.
12. Interpretation hall	-	1 No.
13. Store room	-	1 No.
14. Animal clinic	-	1 No.
15. Reception hall	-	1 No.

13. List of Teak plantations.

Sl. No.	Year	Species	Locality	Extent in Ha.
1	1920 to 1924	Teak plantation	Shankar SF	8.00
2	1925	"	"	4.00
3	1926	"	"	1.60
4	1929	"	"	8.00
5	1930	"	"	10.00
6	1931	"	"	10.40
7	1932	"	"	5.60
8	1933	"	"	6.00
9	1934	"	"	10.00
10	1934	"	"	3.20
11	1934	"	"	3.20
12	1935-36	"	"	14.00
13	1937	"	"	14.00
14	1939	"	"	13.60
15	1939	"	"	14.00
16	1940	"	"	13.20
17	1941	"	"	13.20
18	1942	"	"	12.00
19	1943	"	"	10.00
20	1945	"	"	4.00
21	1945	"	"	2.60
22	1946	"	"	10.00
23	1947	"	"	7.20
24	1948	"	"	6.00
25	1949	"	"	6.80
26	1950	"	"	8.80
27	1951	"	"	12.80
28	1952	"	"	4.80
29	1953	"	"	14.00
30	1954	"	"	10.00
31	1955	"	"	6.40
32	1956	"	"	10.40
33	1957	"	"	30.00
34	1958	"	"	4.00
35	1959	"	"	8.40
36	1961	"	"	12.00
37	1968	"	"	16.80
38	1968	"	Puradalu SF	20.00
39	1969	"	"	40.00

40	1970	“	“	44.80
41	1971	“	“	26.80
42	1972	“	“	29.60
43	1973	“	“	28.00
44	1974	“	“	47.60
45	1975	“	“	23.20
46	1976	“	“	32.80
47	1977	“	“	26.80
48	1978	“	“	18.80
49	1979	“	“	5.32
50	1980	Mixed	“	16.00
51	1981	“	“	12.00
52	1985-86	“	“	4.00
			TOTAL:-	724.72
Hanagere Wildlife Range, Sirigere.				
1	1922	Mixed	Masaruru SF	6.00
2	1926	“	Kudi SF	1.60
3	1927	“	“	2.00
4	1927	“	Masarur SF	8.00
5	1928	“	“	8.00
6	1928	“	Kudi SF	2.00
7	1929	“	“	4.00
8	1930	“	Masarur SF	16.00
9	1930	“	Kudi SF	10.00
10	1932	“	“	8.80
11	1932	“	“	6.00
12	1933	“	“	9.20
13	1934	“	“	11.20
14	1935	“	“	12.80
15	1936	“	“	14.00
16	1936	“	Masarur SF	16.00
17	1397	“	Kudi SF	10.00
18	1938	“	“	10.00
19	1939	“	“	10.00
20	1940	“	“	10.00
21	1942	“	“	10.00
22	1943	“	“	10.00
23	1944	“	“	10.00
24	1946	Teak and Nilgiri(Mixed)	“	7.20
25	1947	Teak plantation	“	11.20
26	1948	“	“	12.00
27	1949	“	“	10.40
28	1949	“	Masarur SF	16.00
29	1950	“	“	16.00
30	1950	“	Kudi SF	15.60

31	1952	“	“	12.00
32	1956	“	Kudi & Masarur SF	8.00
33	1958	“	“	9.60
34	1959	“	Kudi SF	21.60
35	1959	“	“	4.80
36	1960	“	“	8.00
37	1961	“	“	12.80
38	1961	“	“	24.00
39	1961	“	“	11.20
40	1962	“	“	16.00
41	1962	Teak and Nilgri plantation	“	9.50
42	1963	Teak plantation	“	32.00
43	1963	“	“	12.00
44	1964	“	“	2.80
45	1964	“	“	2.80
46	1964	Teak Nilgiri	“	28.00
47	1964	Teak plantation	Kudi Harohithlu	0.40
48	1965	“	Kudi SF	0.28
49	1965	“	Hanagaere SF	9.20
50	1965	“	Kudi SF	0.30
51	1966	“	Hanagere SF	0.10
52	1966	“	Kudi SF	0.14
53	1967	“	“	0.32
54	1965	“	Harohithlu SF	0.40
55	1965	“	“	0.28
56	1967	“	“	0.50
57	1968	“	“	0.28
58	1968	“	“	0.12
59	1968	“	Kudi SF	0.24
60	1968	“	“	0.24
61	1969	“	“	27.20
62	1969	“	Harohithlu SF	0.40
63	1970	“	“	7.20
64	1970	“	“	0.46
65	1970	“	Kudi SF	0.40
66	1970	“	Harohithlu	0.42
67	1972	“	“	35.20
68	1973	“	“	6.60
69	1974	“	Kudi SF	40.00
70	1974	“	Hanagere	20.00
71	1974	“	Kudi SF	20.00
72	1974	“	“	20.00
73	1975	“	Harohithlu	10.80
74	1975	“	Kudi SF	16.00
75	1975	“	Harohithlu	22.40

76	1975	“	Kudi SF	18.80
77	1976	“	Hanagere	20.00
78	1976	“	“	20.00
79	1976	“	Kudi SF	20.00
80	1976	“	“	10.00
81	1977	“	“	40.00
82	1977	“	Harohithlu	20.00
83	1978	“	“	20.00
84	1978	“	Kudi SF	19.60
85	1978	“	“	38.00
86	1979	“	Harohithlu SF	40.00
87	1980	“	Hanagere SF	20.00
88	1980	“	“	11.20
89	1980	“	Harohithlu SF	20.00
90	1981	“	Kudi SF	8.00
91	1981	“	Hanagere SF	3.80
92	1982	“	“	13.20
93	1981	“	Harohithlu SF	2.80
94	1982	“	“	41.60
95	1982	“	“	20.00
96	1985	“	“	4.00
97	1985	“	“	5.00
98	1983	“	Hanagaere SF	11.50
99	1987	“	Kudi SF	22.00
100	1988	“	Hanagere SF	12.80
101	1988	“	Kudi SF	15.20
102	1989	“	“	10.00
103	1989	“	Harohithlu SF	13.20
104	1990	“	“	21.80
105	1990	“	“	25.00
106	1991	“	“	30.00
			TOTAL:-	1848.40
Sacrebyle Wildlife Range, Gajanru.				
1	1958	Teak plantation	Sacrebyle SF	7.00
2	1959	“	“	10.00
3	1959	“	“	7.50
4	1960	“	“	22.80
5	1961	“	“	28.00
6	1962	“	“	30.40
7	1963	“	“	28.80
8	1963	“	“	34.00
9	1964	“	“	8.00
10	1964	“	“	39.20
11	1965	“	“	8.00
12	1966	“	“	44.00

13	1966	“	“	4.00
14	1967	“	“	18.00
15	1967	“	“	40.40
16	1967	“	“	60.00
17	1968	“	“	30.40
18	1968	“	“	86.00
19	1969	“	“	52.40
20	1969	“	“	40.00
21	1971	“	“	29.20
22	1971	“	“	17.20
23	1972	“	“	40.00
24	1972	“	“	18.00
25	1972	“	“	8.00
26	1973	“	“	12.00
27	1974	“	“	42.00
28	1974	“	“	16.60
29	1975	“	“	24.00
30	1975	“	“	20.00
31	1976	“	“	22.00
32	1977	“	“	20.00
33	1977	“	“	20.00
34	1980	“	“	8.00
35	1981	“	“	10.40
36	1982	“	“	8.00
37	1983	“	“	12.00
38	1984	“	“	11.00
39	1985	“	“	8.80
			TOTAL:-	940.00

14. List of enclosures in Shettihalli in Wildlife Sanctuary

I. Shimoga Wildlife Range:

1. Maleshankara.
2. Majnarikoppa - Sharavathi dam rehabilitation villages.
3. Shettihalli.
4. Chithrashettihalli.
5. Kerehalli - Sharavathi valley rehabilitation villages.
6. Kalkoppa

II. Hanagere Wildlife Range:

1. Hanagere SF

1. Hanagere
2. Arenelli Enclosure
3. Belluru “
4. Maskani - Dobyle “
5. Kominakai “
6. Makere
7. Basavanagadde
8. Hanagere (Kerehalli)
9. Chikkakunaje
10. Melkunaje
11. Kalkoppa - Rehabilitated village.
12. Sampigehalla - “

2. Kudi SF:

1. Kesuvinahonda - Sharavathi valley rehabilitation villages.
2. Aadinakottige - “
3. Doddamathli - “
4. Suduru - “
5. Chilumejeddu - “

6. Yerebeesu - “

3. Harohithlu SF:

- | | |
|------------------------------------|-----------|
| 1. Kolavanka | Enclosure |
| 2. Saraganajeddu | “ |
| 3. Basavapura – Harohithlu Gubbiga | “ |

4. Kumadwathi SF

- | | |
|-----------------------------------|--|
| 1. Kagachi - Sulkod – Kurumballi. | Enclosure |
| 2. Vatagaru | “ |
| 3. Siddapura | “ |
| 4. Talale | Sharavathi valley rehabilitation villages. |

5. Baruve SF:

- | | |
|-----------|-----------|
| 1. Baruve | Enclosure |
|-----------|-----------|

15. VILLAGES INCLUDED IN THE SANCTUARY.

I. Sacrebyle Wildlife Range: (Shimoga Taluk)

1. Veerapura
2. Hosahalli
3. Mulkere
4. Basavapura
5. Gajanuru
6. Sacrebylu
7. Halehonnapura
8. Hosahalli
9. Raminkoppa
10. Keegadi
11. Talale.

II. Hanagere Wildlife Range:

Shimoga Taluk

1. Suduru
2. Adinakottige
3. Chikkamathli
4. Doddamathli
5. Kudi
6. Thammadihalli
7. Sirigere
8. Thyavarekoppa

Thirthahalli Taluk

1. Kalkurchi
2. Arenelli
3. Hanagere
4. Basavanagadde
5. Shirinelli
6. Kombinakai
7. Alase

8. Yogimalali
9. Vatagaru
10. Aluru
11. Huttadahalli
12. Thorebyle
13. Aklapura
14. Mallapura
15. Adinajeddu

Hosanaqara Taluk

1. Belluru
2. Vadahosahalli
3. Bidarahalli
4. Maskani
5. Dobyale
6. Gubbiga
7. Talale
8. Kalase
9. Kagachi
10. Kalluru
11. Mugudthi
12. Kanabanduru
13. Thammadikoppa
14. Baruve
15. Malavalli
16. Harohithlu
17. Aarasalu
18. Benavalli
19. Karegodu

III. Shimoga Wildlife Range:**Shimoga Taluk**

1. Shettihalli
2. Chithrashettihalli
3. Maleshankara
4. Manjarikoppa
5. Ittigehalli
6. Channenahalli
7. Puradalu
8. Kerehalli
9. Haihole
10. Hanumathapura
11. Anupinakatte
12. Arakere
13. Aladevarahosuru
14. Bildevarakoppa
15. Anesara
16. Sadalkoppa
17. Thyavarekoppa.

16. List of Teak plantations to be taken up for silvicultural thinning in Wildlife Division, Shimoga During 2005-06 to 2014-15

Sl. No.	Year	Species	Locality	Extent in Ha.
During 2005-06				
Shimoga Wildlife Range, Shimoga.				
1	1959	Teak plantation	Shankar SF	8.00
2	1973	"	"	26.00
3	1975	"	"	23.20
Hanagere Wildlife Range, Sirigere.				
1	1964	Teak plantation	Kudi SF	28.00
2	1965	"	"	30.00
3	1978	"	"	38.00
4	1971	"	Hanagere SF	16.80
Sacrebyle Wildlife Range, Gajanru.				
1	1960	Teak plantation	Sacrebyle SF	23.00
2	1961	"	"	28.00
3	1966	"	"	3.00
During 2006-07				
Shimoga Wildlife Range, Shimoga.				
1	1977	Teak plantation	Shankar SF	26.80
2	1979	"	"	13.30
3	1956	"	"	10.00
Hanagere Wildlife Range, Sirigere.				
1	1971	Teak plantation	Kudi SF	42.00
2	1965	"	"	23.00
3	1977	"	Harohithlu SF	20.00
4	1978	"	"	20.00
Sacrebyle Wildlife Range, Gajanru.				
1	1967	Teak plantation	Sacrebyle SF	6.00
2	1975	"	"	24.00
3	1980	"	"	8.00
During 2007-08				
Shimoga Wildlife Range, Shimoga.				
1	1955	Teak plantation	Shankar SF	6.50
2	1957	"	"	20.00
3	1962	"	"	30.80
Hanagere Wildlife Range, Sirigere.				
1	1976	Teak plantation	Kudi SF	20.00
2	1965	"	Hanagere SF	9.20
3	1976	"	"	20.00
4	1986	"	"	20.00
Sacrebyle Wildlife Range, Gajanru.				
1	1959	Teak plantation	Sacrebyle SF	7.80

2	1963	“	“	34.00
3	1964	“	“	39.20
During 2008-09				
Shimoga Wildlife Range, Shimoga.				
1	1974	Teak plantation	Shankar SF	47.60
2	1978	“	“	18.80
Hanagere Wildlife Range, Sirigere.				
1	1979	Teak plantation	Harohithlu	20.00
2	1980	“	“	20.00
3	1982	“	“	7.00
Sacrebyle Wildlife Range, Gajanru.				
1	1967	Teak plantation	Sacrebyle SF “	80.00
2	1984	“	“	11.00
3	1985	“	“	8.80
During 2009-10				
Shimoga Wildlife Range, Shimoga.				
1	1953	Teak plantation	Shankar SF	14.00
2	1954	“	“	10.00
Hanagere Wildlife Range, Sirigere.				
1	1967	Teak plantation	Shankar SF	22.00
2	1965	“	Hanagere SF	9.20
3	1965	“	“	36.80
Sacrebyle Wildlife Range, Gajanru.				
1	1958	Teak plantation	Sacrebyle SF	7.00
2	1959	“	“	10.00
During 2010-11				
Shimoga Wildlife Range, Shimoga.				
1	1958	Teak plantation	Shankar SF “	10.00
2	1976	“	“	32.80
Hanagere Wildlife Range, Sirigere.				
1	1982	Teak plantation	Harohithlu SF	41.60
2	1982	“	“	20.00
3	1985	“	“	4.00
Sacrebyle Wildlife Range, Gajanru.				
1	1958	Teak plantation	Sacrebyle SF	7.00
2	1959	“	“	10.00
3	1959	“	“	7.50
4	1977	“	Basavapura MF	20.00
During 2011-12				
Shimoga Wildlife Range, Shimoga.				
1	1950	Teak plantation	Shankar SF	8.80
2	1951	“	“	12.80
Hanagere Wildlife Range, Sirigere.				
1	1970	Teak plantation	Kudi SF	16.00
2	1976	“	“	10.00

Sacrebyle Wildlife Range, Gajanru.				
1	1963	Teak plantation	Sacrebyle SF	34.00
2	1964	"	"	8.00
3	1964	"	"	39.20
During 2012-13				
Shimoga Wildlife Range, Shimoga.				
1	1952	Teak plantation	Shankar SF	4.80
2	1970	"	"	44.80
Hanagere Wildlife Range, Sirigere.				
1	1966	Teak plantation	Hanagere SF	25.00
2	1990	"	"	30.00
Sacrebyle Wildlife Range, Gajanru.				
1	1965	Teak plantation	Sacrebyle SF	8.00
2	1967	"	"	60.00
3	1977	"	"	50.00
During 2013-14				
Shimoga Wildlife Range, Shimoga.				
1	1980	Mixed Teak plantation	Puradalu SF	16.00
2	1981	"	"	12.00
Hanagere Wildlife Range, Sirigere.				
1	1966	Teak plantation	Hanagere SF	10.00
2	1966	"	Kudi SF	14.00
Sacrebyle Wildlife Range, Gajanru.				
1	1969	Teak plantation	Sacrebyle SF	52.00
2	1968	"	"	40.00
During 2014-15				
Shimoga Wildlife Range, Shimoga.				
1	1947	Teak plantation	Shankar SF	7.20
2	1948	"	"	6.00
3	1949	"	"	6.80
Hanagere Wildlife Range, Sirigere.				
1	1968	Teak plantation	Harohithlu SF	28.00
2	1968	"	"	12.00
Sacrebyle Wildlife Range, Gajanru.				
1	1971	Teak plantation	Sacrebyle SF	29.20
2	1971	"	"	17.20