

Chapter - VI

Miscellaneous Prescriptions

Boundary demarcation:

177. General:

In the absence of the required details about the total length of boundaries of the division and ranges from the division, an attempt is made to calculate the same. The assessed distances of the boundaries of the division and ranges are given in Table 60.

Table No. 60 Details of boundaries in North Wayanad Division

Sl. No	Range	Portion of division boundary (km)	Common boundary with ranges			Natural boundary (km)	Total boundary (km)
			Peria with begur	Peria with manant-havady	Begur with manant-havady		
1.	Begur	72.95	12.85	---	33.90	43.15	119.70
2.	Mananthavady	75.40	---	31.95	33.90	50.35	141.25
3.	Peria	37.80	12.85	---		10.45	82.60
Total		186.15	---	---	---	103.95	343.55

178. Division boundary:

The total length of division boundary is 704.028 km, which includes 5 km of natural boundary. The boundary of the division is already demarcated on ground with Cairns and kayyala. It is prescribed that the boundary shall be maintained annually with proper repairs and reinforced with belt plantations during the plan period.

179. Range boundary:

The total length of range boundary of Begur, Mananthavady and Peria ranges are 119.70 km, 141.25 km and 82.6 km respectively. This includes division boundary, common boundary with adjacent ranges and natural boundary etc.

The total number of cairns constructed is 6401. The balance to be constructed during the plan period is 6590. This will be done as per the schedule given below.

Table No. 61 Details of cairns to be constructed in North Wayanad Division

Year	Original construction	Amount (in lakhs)	Maintenance		Total amount (in lakhs)
			cairns	Amount (in lakhs)	
2002-03	2000	30	640	3.20	33.20
2003-04	2000	30	840	4.20	34.20
2004-05	2000	30	1040	5.20	35.20
2005-06	590	8.85	1280	6.40	15.25

180. Buildings and roads:

a. Buildings:

The list of existing buildings is given in **Annexure-IX**. Most of the buildings in the division were constructed years back and require special maintenance. New buildings are to be constructed for the accommodation of staff and for the functioning of offices, especially office buildings for Peria and Mananthavady ranges.

b. Roads:

The roads in the division are not properly maintained. Steps may be taken to improve the conditions of the existing roads.

181. Fire management:

General: Fire is one of the most destructive elements that disfigure the forests. Besides being the most destructive element that disfigures the forests, it plays havoc with the ecosystem in a matter of hours, wiping out in the process, perhaps, many an endemic plant life. Fire in natural forests as well as in plantations retard wood production either by burning the trees completely or damaging the parenchymatous cells producing wood.

- Repeated fires in the area lead to gradual disappearance of fire tender species leaving behind fire hardy species.
- Fire destroys the humus reducing soil fertility and also affects soil structure, thus during monsoon the ashes along with loose soil will wash off causing soil erosion.
- Destruction of soil micro flora and fauna during fire will hinder the process of organic decomposition and hence alter the soil nutrient status.

- d. Heat generated during forest fires result in greater evaporation of soil moisture and consequently affect water supply to rivers and streams.
- e. Repeated forest fires have a tendency to transform the forests into the dry deciduous type with fire hardy species and grass lands.
- f. Large fires also destroy the flora and fauna outright and also kill the soil microorganisms.
- g. It denudes the soil, paving the way for massive soil erosion and siltation of rivers and dams, besides causing atmospheric pollution.
- h. Forest fires are detrimental to wildlife by way of direct lethal effects and also by destroying their habitat.

The following measures are prescribed to contain the fire damage:

- i. The boundaries of reserves and enclosures should be cleared to a width of 6 meter during December.
- ii. Plantation boundaries, internal boundaries, and roadsides should be cleared to a width of 5 meters before fire season.
- iii. The inflammable material should be removed from the cleared lines and burnt.
- iv. Sufficient number of mazdoors, especially those who are residing adjacent to forests should be appointed for fire detection and extinguishing.
- v. Staff should be vigilant to prevent forest fire and for deliberate lapses on the part of staff, disciplinary action may be initiated.
- vi. Sufficient funds should be made available at the disposal of Divisional Forest officer for fire control measures.
- vii. Trucks with water tankers be made available at vulnerable points.

Of the three components of fire namely heat, fuel and oxygen, fuel is the one we can manipulate. The volume and spread of the forest fuel have to be curtailed in areas where the introduction of the critical heat component is more than a probability in spite of the best efforts aimed at its prevention. Reduction of fuel and breaking of its continuity will not only be containing wild fire if it happens, but also transforms that into a mild, relatively harmless fire that skims across the forest floor. The three management practices with fire as the tool, which we shall be using, are firebreaks, early burning and hazard reduction burning.

- a. Fire breaks or fire lines are generally 5.2 m wide strips on the forest floor where the inflammable material is cleared and burnt so that any fire trying to reach across the lines starve for want of continuity of fuel and dies out. The fire lines taken along the boundary and the internal ones are to be along the slope because fire will travel faster up a slope. Those fire lines necessitated across slopes should be wider depending on the fuel load, faster will it carry burning embers across the fire line if the fire lines are not wider enough.
- b. Early or controlled burning where the grazers start fire in order to get new flush of grass for their cattle. Department should practice the prescribed burning under controlled conditions, ensuring that the fire is contained as desired and will cater to the local fodder requirements.
- c. Hazard reduction burns are those with which inflammable material is reduced in the forests. The dry slash and top ends etc. left after removal of the timber constitute fire hazard. Fire in such cases should be lit with burners in a manner that the fuel is consumed before the fire gathers momentum and start fire in a fresh area. Essentially fuel breaks and control party should be around while burning.

182. Fire prevention planning:

The main objective of the fire planning is to prepare an advance plan of action for preventing and control of fire. A fire map for the division is to be prepared showing the vulnerable areas based on the fire occurrence in the past. Fire lines over 900 km within the plantations, outside the boundary are proposed. In addition to this the state boundary should be kept clean during fire season. The fire lines are to be taken during December-January. The width of fire lines can vary from 5m to 20 m, depending on the availability of the combustible material.

183. Other activities:

Firewatchers are to be engaged from December to May for 150 days. The fire group (consisting 5 members) are to be camped in a camp shed at an elevated place near the plantation and one of them will be group leader, They are to be equipped with mammatty, fire rakers, billhook etc, on getting the news about incidence of fire

the message will be conveyed to the fire group. If more assistance is required leader will request for the same.

184. Fire training:

Before the commencement of fire season it is proposed to train the watchers, guards and foresters in the fire protection work. They will be given training in fire prevention, fire control and safety precaution for escape. They will be provided with boots, coats, billhooks and such other equipments that are needed for fire fighting.

Table No. 62 Budget requirement for fire protection in North Wayanad

Year	Physical (ha)	Financial (in lakhs)
2002-03	7000	27
2003-04	7000	27
2004-05	7000	27
2005-06	7000	27
2006-07	7000	27
Total	35000	135

185. Staff:

The vacancies of the staff may be filled up at the earliest possible. Field and office staff may be given sufficient in-service training to improve their skill and knowledge in the sphere of their working. The field staff may also be given necessary weapon training for the proper maintenance of the arms and ammunitions given to them.

186. Communication:

The wireless network may be established connecting the division and range head quarters. Communication equipments like walkie-talkies and wireless mobile sets on vehicles may be provided for quick dissemination of information.

187. Collection of wind fallen trees:

Sample surveys conducted in Thirunelly and Hilldale reserve forests of Begur range in North Wayanad division has revealed the presence of the following species of wind fallen timber. They are *Grewia tiliifolia*, *Pterocarpus marsupium*, *Lagerstroemia latifolia*, *Xylia xylocarpa* and occasionally *Dalbergia latifolia*. Most of the wind fallen trees are located in the inaccessible areas of reserve forests. Collection wind fallen trees of valuable species may be done after considering the economic aspects. The availability of wind fallen trees in different reserves of Begur range is given below.

Table No. 63 Details of availability of wind fallen trees in Begur range

Sl. No.	Reserve Forest	Area (ha)	Quantity (m ³)
1.	Alathur	397.284	116.404
2.	Thrissileri	449.946	131.834
3.	Thirunelly	2054.961	174.522
4.	Shanamangalam	177.050	51.876
5.	Ontangadi	140.912	41.287
6.	Oliot	258.533	75.750
7.	Kambamala	637.254	186.715
8.	Hilldale	3026.529	191.426
9.	Hatriharashola	193.711	56.757
Total		7336.180	1026.571

188. Wildlife:

The Wayanad wildlife sanctuary is having common boundary with North Wayanad division in the northeast corner portion of the division. The maximum number of wildlife in the division is seen in the reserve forests of Begur range. Seasonal migration of wildlife from the sanctuary to the division area is common.

General: Wildlife includes any animal, bees, butterflies, crustacean, fish and moths, and aquatic or land vegetation, which form part of any habitat. Dwindling of forests due to one reason or the other, the number and diversity of wildlife has also reduced considerably. Most of the area of this Division is surrounded by human inhabitation and frequent trespass of human beings into the forest disturbs free and fearless movement of wild animals. This may be the chief cause of their sparse occurrence. Wild animals are frequently seen in the portion adjoining Wayanad wildlife sanctuary. They are to be protected and preserved. As per the 1991 amendment of Wildlife Act, schedule 6 was added specifying the species of plants, which are endangered. Scientific management practice should help to improve their abundance and diversity. Public awareness of wildlife is increasing day by day and people are more concerned about conservation.

189. Wildlife Management:

Wildlife is an integral component of the Forest ecosystem, they are to be protected and conserved for posterity. The prescriptions for effective management of wildlife in the division are:

a) Rigid Enforcement of Wildlife laws: Poaching is to be strictly prevented. Cases related to poaching are to be investigated professionally booking the offenders and pursued till its logical conclusions. Sources of secret information may be established and maintained from among the local public who are interested in conservation of wildlife. Funds may be kept at the disposal of the Divisional/Range officers to meet the contingencies of giving incentive to informers.

b) Research: Research on wildlife, as to their habitats, Food requirements, carrying capacity, enemies etc, should be conducted and reports published. Relevant findings of the research organizations like KFRI and WII are to be implemented to improve their habitat.

c) Education: Awareness among the public regarding wildlife conservation aspects is vital to enlist their support in the activities of the department. More publicity through audiovisual aids, meetings, workshops, seminars, nature camps etc tailor-made to different target groups can be arranged on appropriate occasions such as wildlife week celebrations.

d) Game Survey: An inventory of the existing species, their numbers, past history, present condition, factors of environment etc. will be helpful in formulating management plans. The wildlife census is to be conducted in this Division also.

e) Wildlife Habitat: Wildlife habitat must have enough food, cover, water and living space. Based on the findings of the census healthy habitat is to be maintained through managerial interventions wherever required by adopting the techniques that are followed in the adjoining Wayanad wildlife sanctuary.

f) Disease: Certain wild animals are easily susceptible for cattle borne diseases like foot and mouth, anthracnose, black quarter, rinder pest etc that are epidemic and contagious. Grazing of domestic cattle must be stopped to prevent spreading of disease. Facilities for capturing and treatment of wild animals should be provided at the Range headquarters. Tranquilizing gun, medicine, and trained persons should be available at the division. Some of the staff should be trained and posted in places where wild animals are seen frequently.

g) Man Animal Conflict: The dwindling natural habitat of wild animals consequent to biotic interference is forcing them to venture in to agricultural fields adjoining

forests. Crop-raids by elephants, wild boar and deer are frequent in certain parts of Begur, Periya and Mananthavady ranges. Proper education of local people about the causes of such abnormal behavior and remedial measures such as adequate and timely compensation will go a long way in averting such conflicts. At places of high vulnerability and frequent crop raids preventive measures such as electric fencing, trenching etc can be thought off based on the feasibility study.

190. Habitat improvement:

The object of improvement of habitat for wildlife is to increase their distribution and abundance. The managerial interventions should be aimed at increasing the availability of quality food, water, living space and cover to protect them from enemies. Habitat improvement activities can be formulated based on the results of proper game survey and research on requirement different species. The wildlife population is highly dependent on environmental factors. Based on the above facts, establishment and maintenance of waterholes, vials, planting of bamboo, reeds etc can be initiated for habitat improvement by following the similar practices that are adopted by the Wayanad wildlife sanctuary.

191. Thirunelly temple:

Thirunelly Vishnu temple is located in Thirunelly reserve forest of Begur range. The temple is famous and attracts large number of devotees from far and wide. Every day 80 to 100 people visit the temple. The maximum crowd is usually on the Amavasi day (Karkidaka vavu). It is informed that during this year about 6,300 people visited the temple during the Amavasi day. Therefore it is suggested to educate the temple authorities as well as the pilgrims on the importance of ecological values of forests and to exercise restraint in disposal of plastic and other wastes that affect the serene beauty of the place besides affecting the wildlife.