

टेक्नीकल नोट

Technical Note

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टैक्निकल नोट
फाईल



Issued by
CHIEF CONSERVATOR OF

Technical Note No. 1

MARKING OF TREES

1.1 *Definition* :—Marking of the trees implies application of marking hammer impression on the trees to denote their authorised removal.

1.2 *Numbering* :—The trees to be removed will be serially numbered for each lot separately and the number in black paint at breast height will be placed on the blaze made for the hammer mark. In case of trees where stumps are to be retained an additional blaze will be made as close to the ground as possible for marking number and for the hammer mark. The number will be written in the form of a fraction like $1/68$, $2/68$, $3/68$ etc., where the numerator indicates the S. No. of the tree marked and the denominator shows the calendar year in which the marking is done. Care must be taken to ensure that the enumeration number of the tree where existing is left intact. In strips where clear felling is not being done a white cross mark will also be placed near the breast height on the tree to be marked facing the road rail or canal side. Trees of all species marked for felling will be numbered down to a diameter limit of 10 cms. The number of under-sized trees will be estimated and listed together at the end of the marking list and such trees will bear only the hammer mark.

1.3 *Formation of lots* :—The lots will be formed by the marking officer keeping in view the volume of trees marked, control over felling and the carriage lead involved. Normally a lot will not extend over more than one beat or compartment.

1.4 *Measurement of trees* :—The diameter of trees to be marked will be measured down to 10 cms. at breast height i. e. 1.37 metres from ground level.

2. Any forking below breast height will be considered as separate tree.

3. An average of the 2 diameters at right angle to the stem will be taken.

4. The marking will be made in the direction of increasing kilometre/R. Ds.

5. The measurement will be recorded to the nearest cm.

1.5 *Classification* :—All the trees marked will be classified in 10 cms. diameter classes and their volume determined according to the table given below. Where the local volume tables are prescribed for any particular area in the working plan, the same will be followed :—

<i>Class</i>	<i>Diameter in Cm.</i>	<i>Vol. in cubi metres</i>
V	Less than 20	0.06
IV	20 to 29	0.14
III	30 to 39	0.57
IIA ✓	40 to 49	1.13
IIB ✓	50 to 59	1.98
IA ✓	60 to 69	2.83
IB ✓	70 and above	3.54

1.6 *Organisation of marking party* :—The composition of marking party will depend upon the nature of the marking and the volume of the work involved. All the regeneration fellings will be marked by a Gazetted Officer. The innings and other main fellings will be marked by the Range Officer. The marking of dry and fallen trees may be done by the Range Assistant. The Range Officer will, however, ensure by a thorough and personal inspection that the markings done by the Range Assistant are correct. The Divisional Forest Officer will check not less than 10% of the markings. The beat guard will invariably assist the marking party.

1.7 *Submission of marking lists* :—The marking Officer will submit the marking list to the Divisional Office immediately on completion of the work but not later than 30th June.

Where the markings have been done by the Range Assistant, the marking lists will be countersigned by the Range Officer before submission to the Divisional Office. The marking lists will bear on each page the impression of the marking hammer. The list will be prepared in quadruplicate and three copies of the same will be submitted to the Divisional Office and the fourth copy retained in the Range Office. The same will be checked in the Divisional Office by the Assistant incharge of sales to ensure that the following information has been correctly recorded :—

1. Abstract.
2. Sanction of the competent authority authorising sale.
3. Condition of the trees.
4. Three equi-evaluated parts are indicated.
5. The enumeration numbers have been noted.

Two copies of the marking lists will be retained in the Divisional Office, one for the Divisional record and the second for handing over to the purchaser, whereas third copy will be returned to the Range Officer duly countersigned by the Divisional Officer. The Range Officer will incorporate any correction in the fourth copy originally retained in the Range Office.

The following proforma will be used for marking lists :—

Lot No. _____ Year _____
 List of trees marked in _____
 Forest/strips _____ beat _____ Range _____
 on _____.

Authority for marking _____.

Compartment/ Coupe/ R.D/ K. M. No.	Left or right.	Marking No.	Enumeration No.	Species	Mean dia. in cms.	Dia. Class	Condition of tree	Remarks
							green/ dry/ Sound/ unsound.	

At the end of the marking lists, abstract of trees will be prepared by the marking officer according to the under noted

proforma. Sal, Shisham, Kikar, Chil, Sain, Jamoa, Tut, Mango, Khair will be entered separately and the rest will be grouped as miscellaneous. Green and dry trees shall be shown separately in the abstract. The list will be signed by the marking officer and countersigned by the Range Officer if the marking officer is a Range Assistant.

ABSTRACT

Species	Green or dry.	Total No. of trees by dia. class	Total	Vol in M ³	Remarks
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V IV III IIA IIB IA IB

1.8 **Marking Register** :—Marking register shall be maintained on the following proforma in the Divisional Office as well as in the Range Office. The lots for sale will run consecutively during the financial year and entered in the register :—

Lot No.	Name of forest including exact location.	Species	Condition of trees green or dry	Total No. of trees								Total
				V	IV	III	IIA	IIB	IA	IB		
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	
<hr/>												
Vol. in M ³	Date of auction.	Disposal Name of Purchaser.	Amount of sale.	Remarks.								
13.	14.	15,	16.	17.								

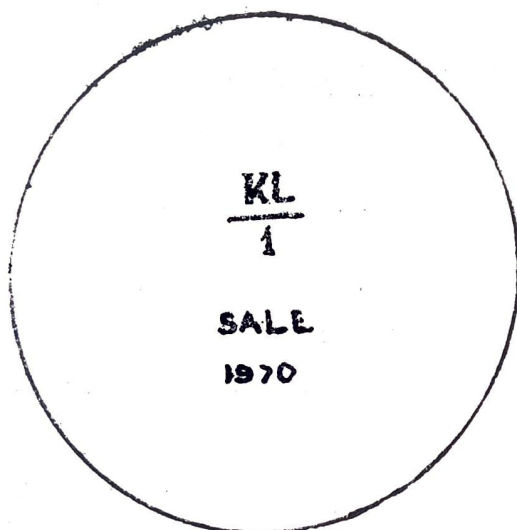
The Range Officer will complete the Range marking register except the lot number before submitting the marking lists to the Divisional Office. The lot number will be filled by him in the register when a copy of the marking list is received back from the Divisional Office.

1.9 **Marking hammer** :—Sale marking hammer for each calendar year will be designed by the Divisional Forest Officer a year ahead of the markings and their supply

arranged. These may be shaped distinctively for use by each marking officer. Their design should not resemble the personal marking hammers. Figures and letters are inset to indicate the Forest Division, year of marking, the serial number of marking hammer and the word 'Sale'. Sale hammer will be used to mark the trees for removal under main fellings and the personal marking hammer for removal of dry, fallen and casual green trees.

1.10 Design.

(a) *Sale hammers*:—The sale hammers will be of 5 cms. diameter and about 900 grams weight. The following design will be used in different Forest Division :—

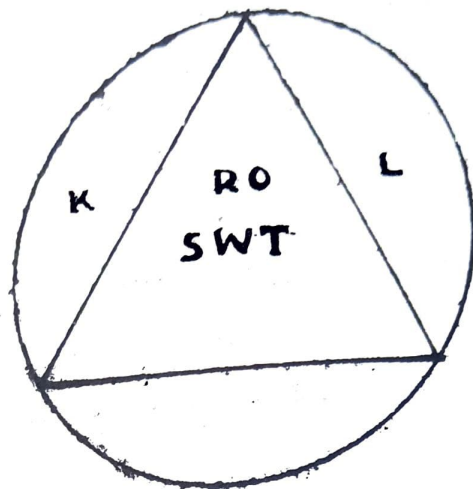


where KL is an abbreviation for Karnal Forest Division. 1 is the serial number of the sale hammer during the particular year. 1970 is the year in which the marking of trees for sale is done. The abbreviations for different Forest Divisions are given below :—

<i>Division</i>	<i>Abbreviation</i>
Ambala	AL
Karnal	KL
Hissar	HR
Mahendergarh	MH
Gurgaon	GN
Rohtak	RK
Morni	MP

(b) *Personal hammers* :—The personal hammers will be of 4 cms. diameter and about 600 grams in weight. Each Range Officer and Range Assistant will be supplied with a personal hammer. Typical Facsimiles of the personal hammers are given below :—

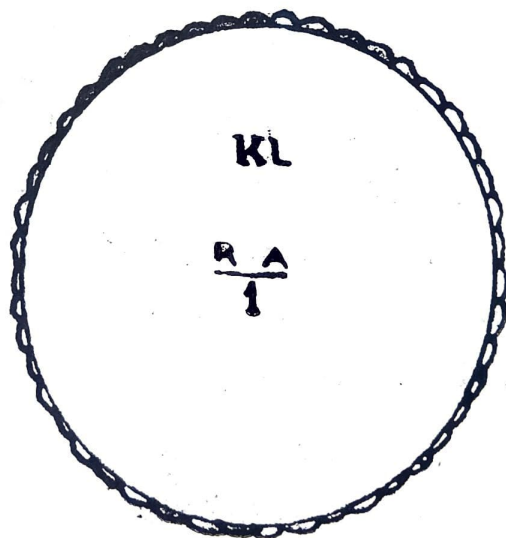
For Range Officer.



KL is an abbreviation for Karnal Forest Division.
RO stands for Range Officer
SWT stands for Saraswati Range.

The abbreviations for the Forest Divisions will be the same as for the sale hammers indicated in the above paragraph. Suitable abbreviation for each Range will be designed, by the D.F.O,

For Range Assistant.



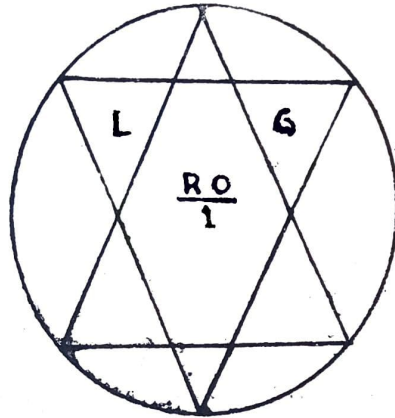
where KL stands for Karnal Forest Division.
R.A. stands for Range Assistant.
1 stands for the first Range Assistant.
2 stands for the second and so on.

1.11 *Hammer mark for departmental logging work* :—
For marking of trees for departmental logging, instructions concerning marking for sale will apply. For marking converted timber, the territorial staff will use their personal marking hammers for work done under their control. In case the timber operations are under the control of a logging unit, the following marking hammers will be used :—

For Range Officer

Diameter 4 cm.

Weight 500 grams



LG stands for logging unit

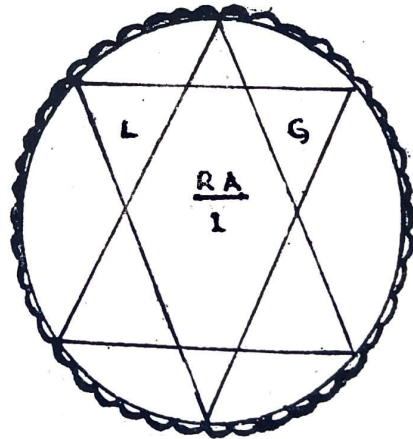
RO stands for Range Officer

I stands for the first Range Officer, 2 for the second and so on.

For Range Assistant

LG stands for logging Unit.

RA stands for Range Assistant.



I Stands for the first Range Assistant, 2 for the second and so on.

1.12 *Supply of Marking hammers*: -The Divisional Officer will arrange the supply and every Range Officer should ensure that he and his Range Assistants have been supplied with personal marking hammers. A Range Officer shall make over the personal marking hammer to his successor, whereas a Range Assistant will carry his personal hammer within the division but deposit it in the Divisional Office in case of

his transfer out of the Division. The incoming Range Assistant shall be supplied with a new personal marking hammer. The sale hammer will be returned to the Divisional Office by marking officer within 30 days of completion of markings but in any case 7 days before the date of sale. Indents for the marking hammers should be placed with reliable firms. Some of the firms who undertake the supply of marking hammers are mentioned below :—

1. M/s Singla & Company, Lock & Brass Fitter merchants, Aligarh (U.P.).
2. M/s C.S. Misra & sons, Sarai Dubey Street, M/s Jha Industries, Pakki Sarai Street, Aligarh (U.P.).
3. M/s Singhai Moji Lal & Sons, Jubbalpore.

The indents will be placed in the beginning of each financial year for hammers required in the next year. The suppliers should be asked to furnish a certificate that the facsimiles will be kept secret and duplicate hammers will not be supplied except under the authority of the indenter.

1.13 *Marking hammer register* :—A register will be maintained in the Divisional Office as well as in the Range Office. The register will be maintained in the following proforma:—

DIVISIONAL REGISTER

S. No.	Date of receipt.	Official to whom issued.	Facsimile	Date of issue	Acknowledgement.	Date of return.	Disposals.
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RANGE REGISTER

S. No.	Date of receipt from divisional Office.	Facsimile	Date of issue	Acknowledgement.	Date of return to office.	of return Divisional
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1.14 *Disposal of marking hammer* :—The sale marking hammers will be destroyed a week before the date of auction

in the presence of the marking officer so that these can not be used again

1.15 *Application of hammer mark:* A blaze of 20×20 cms. should be cut at the desired place on the tree by removing the bark down to the cambium layer with a sharp axe. The hammer mark should be affixed on the blaze with strong stroke of marking hammer so as to leave a clear impression. The hammer mark will be placed towards the lower end of the blaze. The location of the blaze on the tree will be as under :—

(i) *Where stumps are not to be removed.*

The blaze will face down hill to ensure minimum height of stumps to be left and placed as close to the ground level as possible. An additional blaze will be made at breast height

(ii) *Where stumps are to be removed:—*

The blaze will be placed only at breast height facing the road, rail or water channel as the case may be.