



**FOREST SERVICE HANDBOOK
PACIFIC SOUTHWEST REGION (R5)
VALLEJO, CALIFORNIA
FSH 2409.12 - TIMBER CRUISING
HANDBOOK
CHAPTER 70 - PRINCIPLES OF
MEASURING TREES**

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71 - TIMBER MARKING

71.21 - Marking With Paint

Use only tracer paint for all timber sale designations where paint is used. This applies to cut tree marking, leave tree marking, boundary marking, and for special protection zones.

Use two stump marks on all marked trees (cut, leave, or boundary). Put stump marks at or near ground line. On sloping ground, put stump marks on the uphill side and on the downhill side of the stump.

Do not designate boundary trees for cutting. Mark boundaries of individual tree marked units with a color different from the cut tree paint color. Mark boundaries of leave tree marked units with a different color than the leave tree color, if possible.

Ensure attention marks are plainly visible on opposite sides of the tree, and at or above eye level.

There are instances when a marking prescription may change and it becomes necessary to "mark out" previously marked trees. When it is necessary to delete previously marked trees, place a black mark (or any unique color) over or adjacent to the original mark, but do not obscure the original marking. Ensure that Contract Provision C(T) 2.35# states that trees marked with the original marking paint color and black are not included timber. Consult with the Forest Contracting Officer or QCG Manager when special requirements are needed.

Region 5 Paint Scheme for Timber-Related Activities

Work Item	Primary Color	Secondary Color	Tertiary Color
Cut Trees	Blue	Green	**
Leave Trees *	Orange	Pink	White
Cancel Prior Work	Black		
Property Lines	Red (non-tracer)		

* Includes cutting boundary, cultural resource, and wildlife trees.

** Although the National paint scheme allows for three cut tree colors, the color Yellow may only be used with Regional Forester approval.

71.22 - Marking Boundaries

Each forest should establish standard flagging colors to use for routine short term designations on timber sales. This should eliminate confusion by loggers and between different functions within the Forest Service.

71.4 - Designating Without Marking Individual Trees

Recognize that Designation by Description (D x D) is only one of the methods available to designate trees for harvest. Take full advantage of all designation techniques and do not force fit D x D to inappropriate situations.

1. Designation by description may be used:
2. In stands that are homogeneous (stands that exhibit similarity among members of a group) or stands where residual trees can be made more uniform by identifying

selected trees for cutting or retention. Important parameters to determine a stand's homogeneity are the products being removed, value of the product being removed, size (diameter, height) of trees that are being removed or left, or species composition of the stand. In non-homogeneous stands, use conventional methods, such as marking a portion of the stand or using the existing understory or overstory removal provisions in the timber sale contract in conjunction with the D x D.

3. In stands where identification of individual trees for silvicultural purposes is interchangeable with other trees within the stand or trees have the same value, that is, where the selection of one tree over another is not important to the resource management objectives or the value of the timber sale. The stand as a whole is important to meeting resource objectives not individual trees.
4. In stands where silvicultural prescriptions and unit descriptions are kept as simple as possible.
5. For treatments in young stands (for example, first commercial thinning in southern pine or Douglas-fir plantations and northern hardwoods).
6. In stands that are overstocked in a size class, for example, suppressed trees beneath an overstory.
7. Before *DD xx DD* is used ensure that:
8. Adequate staffing and expertise are available for the increased sale administration workload that will result from the use of D x D.
9. Designated trees can be verified immediately after harvest, during sale administration activities.
10. Designation by description should not be used:
11. In diseased stands where symptoms (for example, mistletoe, branch flagging, conks) are used to determine which trees should be removed or left.
12. When individual trees are important to other resources. For example, D x D would rarely be used in riparian zones, critical wildlife habitat, or other such areas.
13. When the National Environmental Policy Act document identifies a high degree of complexity in the vegetation prescription.
14. When identification of individual leave trees is critical to the implementation of resource objectives. For example, a stand where the management objective is to retain a certain percentage of white pine of both large and small size classes or where crown conditions, such as crown ratio or health, are important to determine which trees to leave. In these two cases, marking trees is the more appropriate method for designation.

72 - TRESSPASS PREVENTION

72.12 - Tracer Paint Security

In addition to the requirements for tracer paint storage, inventory, and audit in this section of parent text:

1. Aerosol tracer paint is recommended for issuance to Forest Service contractors designating timber, as this provides better security against mixing additional quarts of paint by dilution.
2. Avoid diluting tracer paint to prepare additional volume of paint, but if this must be done, keep a record of the additional paint mix prepared and account for it as regular tracer paint. If paint is diluted, test the diluted paint for tracer element reaction to tracer test reagent and document the result.
3. Record the batch number (lot number) and date of manufacture for tracer paint in the paint inventory (FS-2400-65). Batch numbers under the current mandatory source, Lighthouse for the Blind, are 5 characters, such as "R0046." In addition to the tracer identification, paint used by the Forest Service may be verified through chemical analysis if the batch number and date of manufacture is known.
4. Keep a record for each timber sale that shows, by unit, the colors of paint and batch numbers with date used for boundary designation, cut tree marking, and leave tree marking. Include a description of the method of designation for each unit. Each forest should include its requirements for tracer paint documentation in its Timber Theft Prevention Plan.