



FORESTRY TECHNICAL NOTE

Photo Guide for Estimating Downed Woody Material

Robert D. Logar, State Staff Forester

Downed woody material provides organic matter to the soil and maintains the site's productivity. Forest slash is the woody residue created from harvesting, pre-commercial thinning and pruning. Slash is a form of downed woody material and consists of the leaves, branches, tops and boles of trees and/or shrubs.

Estimating downed woody material can be difficult. Physical transects can be taken to give estimates of the amount of downed woody material. Visual estimates can be made when reference amounts have been determined.

Two tons/acre of downed woody material is needed to protect the productivity of a site. To reduce the threat of wildfire, slash is treated so that concentrations do not exceed nine tons/acre. Slash will need to be less than two feet in height with exceptions for piling and burning. Optimum amount of downed woody material is between two and nine tons/acre. Figures 1 – 8 are estimates of downed woody material after a pre-commercial thinning and naturally occurring downfall. These photo guides are a tool to aid in estimating downed woody material.



Figure 1. Total downed woody material after a pre-commercial thinning is 7.6 tons/acre.



Figure 2. Total downed woody material in a natural Lodgepole pine stand is 3.5 tons/acre.

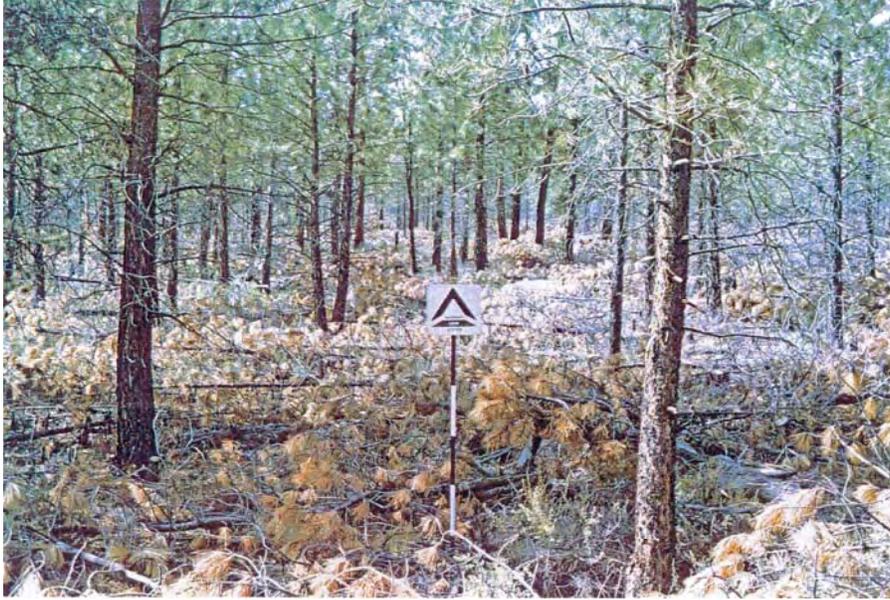


Figure 3. Total downed woody material after a pre-commercial thinning is 10.5 tons/acre.



Figure 4. Total downed woody material after a pre-commercial thinning is 28.5 tons/acre



Figure 5. Total downed woody material in a natural Ponderosa pine stand is 1.1 tons/acre.



Figure 6. Total downed woody material in a natural Ponderosa pine stand is 3.8 tons/acre.



Figure 7. Total downed woody material in a natural Ponderosa pine – Larch stand is 2.5 tons/acre.

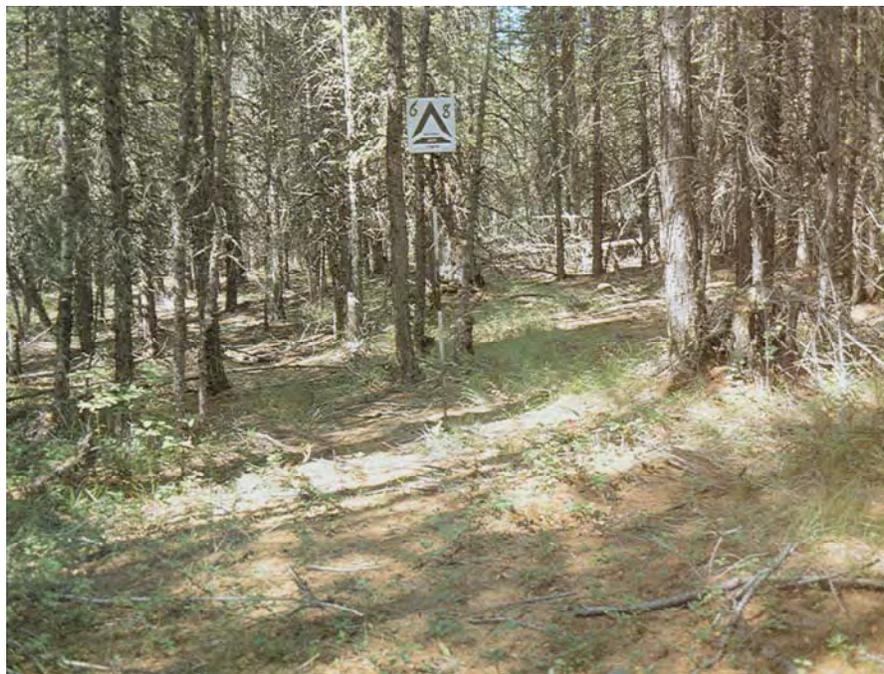


Figure 8. Total downed woody material in a natural Larch – Douglas fir stand is 1.4 tons/acre.