

**MULTI-SCALE ANALYSIS OF FIRE-KILLED DEAD FOR  
MANAGEMENT OF WOODPECKERS<sup>TWS</sup>**

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Fire-killed dead is an important landscape component as well as critical habitat for many wildlife species. Salvage sales are common on National Forest lands after wildfires and result in loss of habitat for many species, including woodpeckers. Limited information is available to help design salvage sales to maintain adequate habitat for these woodpeckers. We propose a multi-scale analysis of this important habitat. This analysis was done for wildfires that occurred in 1998 on the Lolo National Forest in western Montana, which resulted in the decision to salvage within only one fire. Within this fire, we assumed that all stands of fire-killed dead were of equal value to woodpeckers, regardless of patch size or location and a portion of the fire-killed dead was proposed for logging. To test this assumption, we inventoried the fire in 1999 and located 29 woodpecker nests within the 600 ha of stand replacement fire. Results indicate that within the stand replacement burn,

burn intensity, patch size and patch location may be important indicators of the relative value of patches for several woodpecker species. This information can be used to help plan future salvage sales.