

**Bradford**

**Red Pine Thinning Revisited**

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Recent interest in thinning red pine stands stems in part from a recent report showing that thinning from above increases basal area growth 20-30% over thinning from below at mid-stocking levels. We reanalyzed these data to understand responses to thinning prescription in more detail, examining responses in basal area, volume, and biomass over time. Our results suggest that growth responses with thinning from are not as dramatic as estimated, particular for biomass growth, and for all measures when examined at ten year intervals and at typical stocking levels. Additionally, thinning from above, even with a positive growth response relative to thinning from below, may have substantial impacts on mean tree diameter and individual tree quality that are not accounted for by blanket statements about growth responses.