

CROWN RADIUS MODELS FOR EASTERN WHITE PINE

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Using data from 449 trees on 69 growth and yield plots located in southern and central New Hampshire, we developed models of crown radius for stand-grown eastern white pine (*Pinus strobus* L.) in New Hampshire. In addition to DBH, we tested single-tree measurements sometimes collected in forest inventories (such as total height and live crown length). We also tested variables easily derived from forest inventory data that would correct for stand density and competitive position, including basal area per acre, mean tree spacing (calculated from trees per acre) and DBH/QMD. The addition of basal area per acre, DBH/QMD, and mean tree spacing as independent variables provided only minor improvements over a simpler model that predicts crown radius as a linear function of DBH alone. The addition of basal area per acre provided the largest improvement in prediction of crown radius versus the model with only DBH.

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