

FIELD TESTING A SOIL SITE FIELD GUIDE FOR ALLEGHENY HARDWOODS

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Abstract: A site quality evaluation decision model, developed for Allegheny hardwoods on the non-glaciated Allegheny Plateau of Pennsylvania and New York, was field tested by International Paper (IP) foresters and the author, on sites within the region of derivation and on glaciated sites north and west of the Wisconsin drift line. Results from the field testing are presented along with the decision model as modified for both the glaciated and non-glaciated conditions.

Within the region of derivation on the non-glaciated Allegheny Plateau, field testing warranted only a minor modification of the slope criteria for discriminating between the four topographic classes. North and west of that region, lesser topographic variability seems to obviate the need for four distinct sets of site quality decision criteria.

The models serve as practical field guides for foresters, and rely on field determinable decision criteria, including: soil texture, soil stoniness, aspect, shade angle, slope shape, and effective rooting depth. IP foresters and management have adopted the field guide as a principal criterion for forestry investment decisions. A documentation of site potential using the field guide is requisite to budget authorization for individual land management actions.

Suggestions are offered for developing similar field guides elsewhere in the Central and Eastern Hardwood Regions.

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