

SILVICS AND SILVICULTURE OF ASH IN MIXED HARDWOOD FORESTS OF THE SOUTHERN BOTTOMLANDS AND LOESSIAL HILLS

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This presentation describes the silvics of green ash (*Fraxinus pennsylvanica*), pumpkin ash (*F. profunda*), Carolina ash (*F. caroliniana*), and white ash (*F. americana*). Green ash is the primary ash species in southern bottomlands. Pumpkin ash and Carolina ash are relatively minor species with limited ranges that occur on very wet bottomland sites. White ash is the primary ash species in the loessial hills and on other upland sites across the South. The natural range, distribution across site types, and associated forest cover types within the southern United States are outlined for each species. Silvical characteristics addressed in

the presentation include (1) site requirements, (2) reproductive characteristics, (3) shade tolerance, (4) flood tolerance, (5) drought tolerance, (6) fire tolerance, (7) competitive ability, (8) growth rate, and (9) damaging agents. Timber values and wildlife uses of each of the four species are discussed as well. Silvicultural guidelines are presented for green ash and white ash in natural, mixed-species, southern hardwood forests. Topics addressed include (1) recommended regeneration methods in both even-aged and uneven-aged stands, and (2) recommended thinning prescriptions under the guiding principle of stand quality management.