

White Oak Genetics and Tree Improvement Program:
Range-Wide Collaborative Effort

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White oak (*Quercus alba*) occurs throughout the eastern US forests where it is important to the health and ecological function of these forests, and it has high value to the forest products industry. The White Oak Genetics and Tree Improvement Program (WOGTIP) supports the goals of the White Oak Initiative in working to ensure there is a never-ending presence of high-quality white oak in the eastern forests. Limited research indicates that there are good opportunities for genetic improvement in white oak and the WOGTIP was developed as a collaborative program to: (1) quantify range-wide genetic variation and (2) improve traits that have economic and ecological value. The WOGTIP has three phases to achieve these goals: 1) collecting acorns from mother trees, 2) progeny testing the mothers, and 3) producing genetically improved acorns for seedling deployment. The poster presentation describes each of these phases. At present phase 1 is completed, phase 2 is well underway, and phase 3 is yet to come. Access to plant materials and data collected by the network of collaborators are available for research purposes, while widespread reforestation using genetically improved white oak seedlings remains the overarching goal of the program.