

WHITE OAK POPULATION TRENDS— DISTILLING REGENERATION, RECRUITMENT, GROWTH, AND DRAIN CONCERNS ACROSS THE RANGE

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White oak (*Quercus alba*) is an important species globally as one of only two species in the world that regularly produce cooperage (barrels or casks) for wine and aged spirits production and the only one of significance native to the United States. The native range of white oak is vast, over 100 million acres (approximately 40.5 million ha) that spans the Eastern United States. Almost three-quarters of white oak-dominated forests are mature and, in those forests, white oaks tend to be prevalent as large trees, ranking third in standing sawtimber volume across the Eastern United States. However, white oaks are scarce as saplings and highly variable as advance reproduction. Difficulties regenerating oak forests are well-known, and concern over the scarcity of small-diameter white oaks has spurred great interest in the long-term sustainability of this valuable resource among stakeholders in the Eastern United States. In this presentation, we offer analysis of national forest inventory data and other studies that highlight patterns of white oak regeneration, canopy recruitment, growth, and drain at regional and rangewide scales. We discuss sustainability risks and limitations or opportunities for different regions within the range. Finally, we discuss implications and questions raised by those results for future research and management.

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