A COMPARISON OF PRE-EUROPEAN SETTLEMENT AND PRESENT-DAY FORESTS IN STONE COUNTY, ARKANSAS

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General Land Office (GLO) surveyors' notes from 1829-30 were compared with data collected in 1995 from Forest Inventory and Analysis (FIA) plots to quantify changes in forest species composition and tree diameters in Stone County, Arkansas. White oaks (mostly white oak (*Quercus alba* L.) and post oak (*Q. stellata* Wangenh.)) and red oaks (mostly northern red oak (*Q. rubra* L.) and black oak (*Q. velutina* Lam.)) dominated the pre-European settlement forests and accounted for 74 percent of the trees recorded in the GLO survey. In 1995, white oaks and red oaks comprised only 40 percent of the trees tallied in the FIA plots. The decrease in oak importance was accompanied by increases in the relative frequency of eastern redcedar (*Juniperus virginiana* L.), shortleaf pine (*Pinus echinata* L.), hickories (*Carya* spp.), and flowering dogwood (*Cornus florida* L.). White and red oak diameters were generally larger in 1829-30 than in 1995. Possible explanations for these changes include the increased frequency of human-caused disturbances such as timber harvesting, a decrease in wildfires since the early to mid-1900s, and surveyor bias.

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