

REGIONAL PATTERNS OF PRESETTLEMENT FORESTS IN THE BOSTON MOUNTAINS OF NORTHWEST ARKANSAS

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ABSTRACT

While diverse, mixed mesophytic forests are primarily found in the Appalachian Highlands, strikingly similar forests are noted as occurring in protected slopes and coves within the Boston Mountains of northwestern Arkansas. This project uses General Land Office survey records predating extensive European settlement to reconstruct regional forest patterns. Survey records were digitized into a Geographic Information Systems database in order to interpolate land cover and forest types as well as map tree species distributions within the study area. The results of this project show that woodlands and closed canopy forests dominated the landscape. While the forests of the Boston Mountains were dominated by regionally typical oak and hickory species, results show the presence of a mixed mesophytic forest type. This species association was found in the most rugged and protecting portions of the study area and displayed many traits common in southern Appalachian mixed mesophytic forests.