

A COMPARISON OF LOW AND HIGH ELEVATIONAL TABLE MOUNTAIN PINE FORESTS IN THE SOUTHERN APPALACHIAN MOUNTAINS

Patrick H. Brose and Thomas A. Waldrop

Brose, Patrick H.; Waldrop, Thomas A. 2009. A comparison of low and high elevational Table Mountain pine forests in the southern Appalachian Mountains. Abstracts of the 14th biennial southern silvicultural research conference. 2007 February 26-28; Athens, GA. U.S. Department of Agriculture, Forest Service, Southern Research Station.

Abstract: Table Mountain pine stands are an uncommon forest type found on dry ridges and upper slopes throughout the southern Appalachian Mountains. They occur most frequently within an altitudinal zone ranging from 300 to 1200 meters above sea level. This talk and paper compares the composition, structure, disturbance history, successional trends, and other physical characteristics of 10 Table Mountain pine stands found at the lower and upper ends of this altitudinal zone. The four stands at low elevation (400 to 600 m) grew on ultisols, were even-aged and uneven-aged, contained approximately 1400 stems per hectare of 20 woody species and 40 m² of basal area per hectare, and showed signs of past fires and logging. The six high elevation stands (900 to 1100 m) were similar in age structure to the low elevation stands but differed in soil type, species composition, stem density, basal area, and degree of disturbance, especially human-mediated disturbance. The differences between these two sets of Table Mountain pine stands illustrate the importance of elevation in affecting the vegetative composition of the Southern Appalachian landscape.