

THE DEVELOPMENT OF A
CENTER FOR FOREST ENVIRONMENTAL STUDIES

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The stresses that affect forests change constantly and forest managers must decide how to maintain healthy and productive forests when they know these resources may be affected by changes in a variety of environmental parameters; for example, increasing concentrations of tropospheric ozone, increasing sulfate loadings, increasing intensity of ultra-violet light, increasing concentrations of CO₂, increasing temperatures, and increasing frequency and severity of drought. The USDA Forest Service Center for Forest Environmental Studies was built in Macon, Georgia by Forest Pest Management of Region 8 with funding from the Southern Commercial Forest Research Cooperative to provide a state-of-the-art facility that will produce the information foresters need to help them evaluate and deal with these changing environmental stresses, particularly those relating to air pollution. The Center consists of a headhouse, a climate-controlled greenhouse, and laboratory facilities. Existing exposure equipment includes twelve rain tables and twenty Continuously Stirred Tank Reactors. The Center staff will include people with expertise in air pollution, plant physiology, genetics, and soils. The Center will be used to evaluate the effects of, and study the response of tree seedlings to various stresses, to develop procedures for screening families for tolerance to stresses that are found to be significant, and to provide screening services to foresters both inside and outside the Forest Service.