

FOREST SERVICE SOUTHERN REGION NATIONAL FOREST SYSTEM – IT’S ALL ABOUT GRITS

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The Southern Region’s National Forests are home to some of the most biodiverse forests in the country. Over 140 tree species occupy coastal, piedmont and mountain landscapes. Southern ecosystems are extremely vulnerable to forest health issues and climate change impacts. Updated management strategies are therefore required to support and maintain healthy, sustainable, resilient and productive vegetation on the National Forests, for now and into the future.

Genetics programs play a key role in developing and supporting successful land management activities, which include reforestation, restoration and gene conservation. Being proactive and creative with current and future needs is critical, as is flexibility in developing and integrating new ideas and management strategies. Our Genetic Resource program is constantly evolving and transitioning (Genetic Resources In TranSition “GRITS”) to hedge our bets for success in future predicted climate scenarios. Assessment tools, such as *Forest Tree Genetic Risk Assessment System* (FORGRAS 2010) and *Conservation and Prioritization of Tree Under Risk of Extirpation* (CAPTURE 2016) have been developed which rank the vulnerabilities of many of our tree species to current and future risks. Many tree species have been identified as imperiled and subsequent seed collections are ongoing. We have engaged in multiple partnerships, especially with Camcore, to increase awareness of tree conservation concerns and orchestrate seed collection efforts. Actions and tools for restoring or retaining multiple tree species on the landscape are in development, including 1/ tree conservation collection protocols, 2/ updated seed zones, 3/ guidance for mixing seed lots to match updated seed zones, 4/ updated planting range maps and 5/ protocols for establishing conservation banks and restoration seed reserves on our seed orchards.

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