

## **Scope of Forest Tree Breeding in the USFS**

Marilyn Buford<sup>1</sup> and Randy Johnson<sup>2</sup>

<sup>1</sup>National Program Leader, Silviculture Research USDA Forest Service R&D and <sup>2</sup>National Program Leader, Genetics and Silviculture Research USDA Forest Service

US Forest Service plant breeding programs function to meet the needs of federal land management agencies, state and tribal nursery programs, and private land owners and businesses. In the past, breeding objectives centered on improving productivity, wood quality and disease resistance in forest trees. More recently, breeding for disease and pest resistance has become more important as we combat diseases and pests that threaten US forests. Our genetics and tree breeding programs are critical components of developing innovative forest management opportunities to meet the Nation's needs.

These programs provide foundation material for research in the areas of biotechnology, genomics, disease resistance, and traditional population and quantitative genetics. In turn, these results are incorporated into our breeding programs and others around the world.

US Forest Service plant breeding programs involve Research & Development, National Forest System, and State & Private Forestry. Much of our work is conducted in collaboration with federal, university, industry, state, tribal and NGO partners.