

USDA Forest Service Cooperates with the USDA National Center for Genetic Resources Preservation on a Nationwide *ex situ* Plant Genetic Resources Conservation Plan

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The USDA Forest Service, National Tree Seed Laboratory and the USDA National Center for Genetic Resources Preservation (NCGRP) have entered into a cooperative agreement to begin conserving plant species through long-term seed storage. Seeds of all forest plant species, located on National Forests and private forest lands of the United States, are to be considered for storage. Seed collections of threatened and endangered plant species can be included with a permit from the US Fish and Wildlife Service. This agreement falls within the *ex situ* section of the Plant Genetic Resources Conservation Plan developed by the Forest Service.

Seeds are classified as base collections and are stored in a disaster proof cold storage vault at -18° Celsius. Active collections, which may include forest habitat, clone banks, seed orchards, or vegetative material, are maintained by their owners, and the owners have sole responsibility for any plant material distribution.

The National Tree Seed Laboratory is responsible for ensuring the seeds are clean, seed testing, cataloging seedlots, and packaging before the seeds are shipped to the long-term seed storage facility in Ft. Collins, Colorado. Each seedlot receives an accession number and seed information is stored in a database at the National Tree Seed Laboratory and becomes part of the USDA Germplasm Resources Information Network (GRIN), which can be accessed through the internet. Information on the active collections' location and ownership is kept in order to replenish the accessions when seeds are depleted or lose vigor.

Seed packets with a minimum of 500 seeds and no more than 3,000 seeds per seedlot accession can be stored in the cold storage vault. A retesting schedule is developed for each accession depending on the number of seeds available. Due to the small amount of seed in storage, seed requests need to be filled through the active collections with the owner's permission. No seed distribution of threatened or endangered species is allowed.

Once procedures are developed for long term seed storage, other vegetative material will be added to the agreement and incorporated in the *ex situ* plant genetic resources conservation plan.