

# Endangered Species Act 40<sup>th</sup> Anniversary Success Stories Holy Ghost Ipomopsis



Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*) is known from only a single location (Holy Ghost Canyon) in the Sangre de Cristo Mountains of north-central New Mexico. It was listed as endangered under the federal Endangered Species Act in 1994. The draft Recovery Plan prescribes the core of the recovery effort is several out-plantings to establish new populations in similar habitats within the tributary canyons of the upper Pecos River.

The Forest Service worked together in partnership with New Mexico State Forestry, Natural Heritage New Mexico, University of New Mexico, U S Fish and Wildlife Service, and many amazing volunteers. Together we planted three new experimental populations of the Ipomopsis in three separate tributary canyons (Indian, Winsor and Panchuela Creeks) along the Pecos River corridor, and also supplemented the population in Holy Ghost Canyon in hopes of down listing this species to a threatened status.

In 2011 research plots were established and baseline data was collected prior to a forest thinning in Holy Ghost Canyon. These plots were re-seeded and re-planted with Ipomopsis. The thinned locations showed to have a good survival rate the following year. But natural processes such as drought and hungry wildlife will pose an additional threat to this supplemental population. Regardless of all of the activities taking place, it will take a few years to determine if these new plants can re-establish themselves from seed.

In 2012, the experimental populations in Indian, Winsor, and Panchuela Creeks were assessed for survival and reproduction. Unfortunately the Panchuela population had a low survival rate of plants and Winsor had a greater rate of survival in plants than in Panchuela. The Indian Creek population had the greatest abundance of plants. Only time will tell how successful these populations will be. But our efforts in trying to supplement and study the existing populations and experimental populations will continue. Hopefully we will find success in all of our endeavors to conserve this species.



Figure 1. Close-up of Holy Ghost Ipomopsis Plant



Figure 2. Volunteers planting Holy Ghost Ipomopsis



**Southwestern Region**  
**Santa Fe National Forest**  
Pecos-Las Vegas Ranger District