

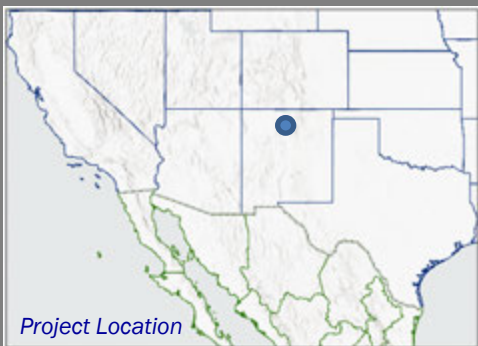
# FIRE MANAGEMENT

## Forest Mayordomos: A Collaborative Forest Management Strategy



### INTRODUCTION

The Carson National Forest in northern New Mexico is home to 1.5 million acres of fire-adapted forests that depend on frequent low-intensity fires. Over 100 years of wildfire suppression has increased tree and fuel density. The accumulation of burnable fuels, climate change, and drought increase the size and severity of wildfires. In 2018, community members and the USFS formed the Cerro Negro Forest Council (CNFC), the first forest mayordomo project in New Mexico. Modeled after acequia practices traditionally used for water management, the CNFC draws on the connection community members have with the land to restore the forest. The CNFC reduces the density of trees and burnable fuels, protects communities from wildfire, involves the community with forest stewardship, provides firewood and economic opportunities, and improves collaborative relationships with USFS.



Project Location



A Leñero's One Acre Plot After Thinning

### KEY ISSUES ADDRESSED

The CNF needs additional capacity to reduce excess fuel loads that increase the risk and severity of high-intensity wildfires that can harm forest ecosystems and local communities. Past forest regulations and management practices have caused many residents to feel that they are spectators rather than involved in forest management. Residents fear how drastic changes to the forest, worsened by climate change, threaten forest health and their cultural connections to the landscape. Many residents use firewood to heat their homes and are restricted from harvesting firewood nearby.

### PROJECT GOALS

- Establish the CNFC to remove excess heavy fuels and strengthen connections between the local communities and USFS
- Reduce barriers to cultural connections between local community members and the land
- Provide a sustainable way to make fuelwood accessible to local communities

## SPREADING SUCCESS

The Forest Mayordomo Model has already been adopted in four other locations in New Mexico on a variety of land ownership types, including state land.



Local Students Conducting Pre and Post Monitoring

## PROJECT HIGHLIGHTS

**Restoring the Forest:** By thinning 1-acre sections of forest, community volunteers, known as leñeros have increased native grass cover and reduced wildlife risk.

**Increasing Capacity:** Leñeros who are part of the CNFC restore the CNF via manual thinning using their own tools and resources. As leñeros gain more experience, USFS does not need to focus as many resources on marking trees and conducting quality control. As leñeros conduct labor-intensive thinning near communities like Valdez and San Cristobal, the USFS can focus more time and resources on other larger projects.

**Connecting Communities:** Leñeros bring family members with them when harvesting wood. This allows for leñeros and their families to reconnect with the land through a sense of shared stewardship.

**Collaboration in Carson:** Funding and capacity for monitoring results of forest treatments is often limited. Woodcutters, rangeland specialists, high school students, and Taos Soil and Water Conservation District provide added capacity to collect data about the forest and track improvements in forest health.

**Reaping the Rewards:** Participating leñeros receive \$300/acre thinned and can keep, share or sell harvested wood.

## Collaborators

- USFS Carson National Forest
- Taos Soil and Water Conservation District
- See online for full list of partners

CART Author: Alex Gerber, SW Fire and Climate Adaptation Partnership, Feb 2024.  
Photos Courtesy of J.R. Logan, CNFC  
For more information on CART, contact Genevieve Johnson ([gjohnson@usbr.gov](mailto:gjohnson@usbr.gov)) or Karlee Jewell ([karlee\\_jewell@fws.gov](mailto:karlee_jewell@fws.gov)).

Visit CART:



## LESSONS LEARNED

The CNFC provides additional capacity to reduce fuels on high-risk priority areas of the CNF. However, fuel removal efforts are slow as leñeros are typically non-professional woodcutters. Acres assigned must be easily accessible and new or improved roads may be needed because leñeros use personal vehicles to access their lots. However, new roads can increase soil erosion. Root rot and bark beetle infestations slow restoration work. Additional time is needed for leñeros to cut trees with root rot safely and avoid spreading beetles when transporting infested trees. Using pre-existing forms of governance, instead of forming new systems, and working with local leadership has increased the efficiency and effectiveness of the CNFC, led to improved communication, and reduced conflict. Leñeros leave behind tree tops and limbs, known as slash, after cutting that can act as a fuel for fire if not burned. USFS uses prescribed burns to remove slash safely after the acres are completed. However, hotter, drier climates and shortened burn windows have made it difficult for slash to be burned in a safe and timely manner. The CNFC must balance giving woodcutters the ability to cut at their own pace and safely managing the slash left behind.

## NEXT STEPS

- Continue establishing forest mayordomo programs in other areas
- Experiment with slash mastication to reduce fuel hazards without relying on shorter burn windows
- Expand analysis of the effects management on the watershed's hydrology and forest health

For more information on this project, contact J.R. Logan:  
[delmedioforestry@gmail.com](mailto:delmedioforestry@gmail.com)



Firewood Harvested from a One Acre Plot Thinned By CNFC