



Natural Resources

The History of Timber Harvest on the Valles Caldera National Preserve

In the 2004 technical report, "Assessment of Timber Resources and Logging History on the Valles Caldera National Preserve", Jeff Balmat and John Kupfer¹ succinctly described three distinct eras of harvest, defining the logging history of the Preserve. Each era was characterized by methods and approaches that reflect the technological, political, and economic context of the period.

Pre-1935. Small timber firms began commercial logging operations in the Jemez Mountains in the late 1800s (Martin 2003). Limited by access, these operations easily reached ponderosa pine stands around the village of Ponderosa, in the Cañon de San Diego Grant, south of the Baca (Glover 1990). Harvesting within the Baca, if there was any, was relatively insignificant.

1935-1962. The New Mexico Timber and Lumber Company later named the New Mexico Timber Company (NMT) bought the timber rights to the Baca from the Redondo Development Company in 1935, commenced logging, and oversaw logging operations from then until 1972. From 1935 to 1962, the ponderosa pine stands of the Baca were "high-graded", with the best ponderosa pine sawlogs greater than twelve inches in diameter being harvested from the lower elevations, save for a few seed trees per acre (Martin 2003). Approximately 10,380 ha (25,641 ac; 38% of forested area) were harvested using light to heavy selection cutting in the southwest corner on the Banco Bonito lava flow, the northern and eastern rims (Garita and north of Valle Toledo), and around the base of Cerro del Medio, Cerros del Abrigo, and Cerros de Trasquilar (USFS 1993). Before chainsaw technology became pervasive, crosscut saws were used to fall timber. Logs were skidded by horses to decks where trucks waited to haul the logs to the mill. Toward the end of the era, middle elevation mixed conifer stands were harvested as roads and technology improved.

1963-1972. Improved technology and roads enabled clear-cutting of all species and sizes on approximately 4700 ha (10,589 ac; 16% of forested area) of the Baca from 1963 to 1972 (USFS 1993, Martin 2003). During this era, NMT employed jammer logging, a cable logging system where a mechanical cable winch hauled logs directly from the stump to roadside collection points. At the Baca, the trees were then taken to the mill by truck and large slash piles were left in place of trees (USFS 1993, Martin 2003). Regulatory changes and a new pulpwood mill in Arizona further aided intensive harvesting during this period. Legal action halted NMT and its intensive logging methods in 1972 (Martin 2003).

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Jammer logging was supported by a dense network of thousands of kilometers of new, contour-parallel roads, sometimes less than 300 ft (90 m) apart, spiraling up the forested domes of the Baca (Fig. 3) (Allen 1989). The roads permitted logging of steep and high elevation slopes and contributed to fragmentation of the remaining forest areas. Lack of conservation practices caused severe soil and water quality damage as well as aesthetic depreciation of the landscape. These unsustainable practices still affect the biological, economic, and aesthetic qualities of today's forests.

1980-2000. From 1980 until the sale of the Baca to the US government in 2000, logging proceeded at a more conservative pace under the guidance of the New Mexico State Forestry Office. Approximately 1100 ha (2,739 ac, 4% of forested area) were harvested between 1980 and 1992 (USFS 1993). Most harvests employed selection cutting and were guided by conservation-minded guidelines established by the State (New Mexico State Forestry 1990). Selection cutting harvests a portion of mature trees, usually the largest and highest quality individuals of the most valuable species. The proportion of trees harvested varied widely. Some patch cutting took place (a patch is a small clear-cut). Logging was carried out in many areas of the Baca including the Cerros del Abrigo, Cerro del Medio (much of which had been previously harvested), and the Sierra de los Valles on the eastern caldera rim (USFS 1993).

FIGURE 3. MOST MAJOR ROADS (THICKER LINES) WERE BUILT DURING 1935-1962 TO FACILITATE HARVEST OF ACCESSIBLE STANDS NEAR VALLES. MOST MINOR ROADS (THINNER LINES) WERE BUILT DURING 1963-1972 TO FACILITATE CLEARCUTTING.

