



## Research Brief for Resource Managers

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## A Snapshot of Fire Activity Prior to Fire Suppression

*Minnich, R.A. 1987. Fire behavior in southern California chaparral before fire control: the Mount Wilson burns at the turn of the century. Annals of the Association of American Geographers 77:599-618.*

This 1987 paper by Richard Minnich summarizes newspaper accounts for selected fires between 1868 and 1900 in the San Gabriel Mountains of southern California, and describes in detail the behavior of three summer fires in 1896, 1898 and 1900 on Mt. Wilson.

Over 35 fires during the latter third of the 19<sup>th</sup> century were noted, representing a range of different fire behaviors. Some of these appeared to burn slowly for long periods and others were described as “extensive conflagrations raging in the mountains” (see Table 1). Three fires over a 5 year period near the end of the century were described in greater detail.

As reconstructed from newspaper accounts the three selected fires apparently burned for two-three months during late summer and early fall. During this time the fires were described as smoldering fires that crept along at a rather slow pace interrupted at times by flare ups throughout the period. The **1896 Arroyo Seco Fire** was a lightning-strike fire lasting from September 1 to October 16 with four different major flare-ups between long periods of smoldering. Likewise, the **1898 Mt. Lowe Fire** lasted from July 28 to October 29 and the **1900 Santa Anita Canyon Fire** lasted from July 22 to September 2 with

### Management Implications

- Newspaper accounts from the 19<sup>th</sup> century describe many large wildfires in the southern California mountains. Some of these were described as low intensity smoldering fires and others as raging infernos.
- The San Gabriel Timberland Reserve was established on December 20, 1892 because of concern for poor land use practices, especially overuse of fire by cattlemen and sheepherders. USGS reports for the area, dated 1899 and 1900, showed large areas of chaparral had been repeatedly burned with severe damage to soil and water holding capacity.
- In this rugged terrain fires started during lightning storms potentially would burn for months with many changes in fire behavior.

similar patterns of smoldering and flaring, consuming both shrublands and forests at different times during this period.

Prior to fire suppression fires in this mountain range often burned for many months, sometimes burning slowly producing low intensity smoldering fires and at other times responding dramatically to changes in weather and turning violent, producing catastrophic raging infernos not unlike some of the worst contemporary fires.

**Table 1. Reports of Fires in the San Gabriel Mountains**

Year	Date	Comments in newspapers and other sources	Source
1868	August 29	Perhaps rain fell enough to quench the fires which were raging in the mountains.	<i>Los Angeles Star</i> <sup>a</sup>
1869	September 11	During the past week, clouds of smoke have been sent forth from a tremendous fire about midway up the Cucamonga Mountains.	<i>San Bernardino Guardian</i> <sup>b</sup>
	September 21	Fires raging from San Bernardino to Jacumba.	<i>L.A. Star</i>
	October 2	For four or five weeks past the fires continued to rage along the mountain sides and tops in all directions [from San Bernardino].	<i>S.B. Guardian</i>
1869	October 9	Fires were burning over the San Fernando Plains last week on each side of the road.	<i>L.A. Star</i>
	October 16	A great deal of damage has been sustained by persons engaged in the wood business by the extensive conflagrations raging in the mountains.	<i>L.A. Star</i>
1870	October 1	Extensive fires have been raging for the past week in the mountains in the direction of Cajon Pass [from San Bernardino].	<i>S.B. Guardian</i>
1871	October 21	During the past week, extensive fires have been raging in the Cucamonga range of mountains north east [ <i>sic</i> ] of town.	<i>S.B. Guardian</i>
1872		Fires burned in the mountains [northeast of the San Fernando Valley] practically from June to September, some burning for weeks at a time.	Mendenhall (1930,1); Oberbeck (1938,31)
		Fires have been raging in the mountains in the Cajon Pass.	<i>S.B. Guardian</i>
	August 27	A fire is said to be raging in the mountains and the excessive heat is attributed to that cause.	<i>L.A. Star</i>
	August 29	There was lots of fire and rain yesterday and today. In many places the fires were very extensive.	<i>Los Angeles Evening Express</i> <sup>c</sup>
	September 18	An extensive fire that broke out on the left bank of the [San Gabriel] River near the ranch of Henry Roberts has burned the whole country 9 miles up the river.	<i>L.A. Star</i>
1873	September 17	The weather was warm all day yesterday, the heat being caused, no doubt, by fires in the mountains.	<i>L.A. Star</i>
1874	August 22	The fires in the mountains have all disappeared.	<i>L.A. Star</i>
1875	October 8	A dense volume of smoke overhung the city. . . the heat was caused from the combined influence of the weather and the fires raging in the mountains.	<i>L.A. Star</i>
	October 18	The impression that the intense heat which is now prevailing is due to . . . fires raging in the mountains seems to be gaining ground.	<i>L.A. Star</i>