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## Letter to the Editor

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## Fire Suppression Activities Cannot Be Blamed

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Dr. Minnich's recent article ("Fire is inevitable but we can mitigate the damage," San Diego Union-Tribune, Nov. 2, 2003), and an earlier piece ("Taming wildfire: Lessons learned from south of the border," San Diego Union-Tribune, Sept 1, 2002), places the blame for catastrophic wildfires on fire suppression activities. His suggestion that fire suppression policy is broken is based on an unproven hypothesis that is not supported by scientific evidence.

Twenty years ago Minnich observed that fire size differed between north and south of the U.S./Mexico border and hypothesized that this was due to differences in fire suppression policy. His hypothesis is that fire suppression activities during the 20<sup>th</sup> century have effectively excluded fire from much of the southern California landscape and allowed an unnatural accumulation of shrubland fuels. Dr. Minnich has never tested his hypothesis, yet he freely speaks about it as though it were a proven fact, and he does this despite knowing that four separate scientific studies have tested his idea and failed to support it.

In 1998, Drs. Sue Conard and David Weise of the U.S. Forest Service, Riverside Fire Lab, examined 20<sup>th</sup> century fire records for the San Bernardino Mountains and found no evidence that fire suppression activities had excluded fires from that landscape. In the following year, I and my colleague C. J. Fotheringham of the University of California, Los Angeles extended this analysis to all of the counties from the border to Monterey and found that during the 20<sup>th</sup> century, fire suppression activities had not excluded fires and that large wildfires were not the result of unnaturally old shrublands with excessive fuels. More recently, Dr. Rick Shoenberg from the University of California and Dr. Max Moritz from Cal Poly, San Luis Obispo have independently examined the extent to which fires in southern California are dependent on unnatural fuel accumulations and found no support for this idea.

Minnich's suggestion that large shrubland wildfires are a modern artifact of fire suppression policy is not upheld by historical documents. Indeed, a fire in Orange County in 1889 was twice the size of this past week's Cedar Fire, and there are other such reports in the historical records of the 19<sup>th</sup> century. Throughout the 20<sup>th</sup> century the southern California landscape has experienced repeated assaults from wildfires despite vigorous fire suppression activities. Very few small pockets of chaparral shrublands have had fires excluded from them for any extended length of time. Today the southern California landscape burns more frequently than it did prior to Euro-American colonization. In this respect, southern California stands as an anomaly relative to the rest of the western U.S. where fire suppression has effectively excluded fire for much of the past century.

Two factors account for the inability of fire suppression forces to eliminate fire from this landscape. The primary culprit is the fierce Santa Ana winds that occur every autumn and create the worst fire conditions observed anywhere in the world. The second is the growing human population that ignites nearly all of our wildfires. During the 20<sup>th</sup> century there has been a parallel increase in population and fires. When humans, by accident or intent, ignite a fire during a Santa Ana wind condition, the result is a fire that will race across the landscape burning everything in its path.

Currently, there is much discussion about using fuel manipulations to reduce fire hazard. It is important to realize that these discussions pertain to forests in the Western U.S. and do not apply to California shrublands. There is substantial evidence that prior fuel manipulations such as mechanical thinning and prescription burning are not effective at stopping the onslaught of Santa Ana wind driven fires.

Dr. Minnich's proposal that we create a landscape mosaic of different ages of chaparral shrublands not only will not act as a barrier to Santa Ana wind driven fires, but it is unfeasible due to the cost, and the limited burning opportunities resulting from air quality restrictions. Fire suppression policy is not broken, it is mandatory in the densely populated landscape of southern California. In addition, historical evidence shows that it is playing an important role in reducing an unnaturally high level of burning resulting from human recklessness. Without vigorous fire suppression activities our landscape would burn at such a high rate that much of the natural shrublands would be more rapidly converted to alien weed-dominated grasslands than is currently happening.

A more strategic approach is required, one that moves away from measuring fire hazard reduction success in terms of "acres treated," as is currently used, to one that places the focus on fuel treatments at the urban/wildland interface. Strategic placement in this zone is necessary because fuel manipulations will not act as barriers to Santa Ana wind-driven fires, but they may allow better access to fire suppression forces attempting to save property and lives. Equally important as fuel reduction at this interface is the need for fire management agencies to better express the fact that there are limitations to their ability to prevent large wildfires, particularly when ignited during Santa Ana winds. Both of these ideas need to be closely integrated into land planning at the local and regional scale, with greater focus on consolidating development and reducing the extent of the urban/wildland interface.

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