

FOCUS: CULTURE, CONSERVATION, AND RED TAPE: EXPERIENCES IN CALIFORNIA INDIAN PRESCRIBED FIRE RESEARCH

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Background

Indigenous communities throughout California are exemplary in their historic use of fire at a landscape scale. This fire use stems from a cultural obligation to care for the land. In order to strategically complete burning regimes at a landscape scale community participation would be required. Individuals may have traditionally held responsibilities to manage patches of specific resources or designated areas of the land. At a landscape scale, the integration of burning would have required a concerted effort and understanding of site-specific burning patterns at variable spatio-temporal scales. Unfortunately, the virtual abolishment of indigenous burning practices throughout much of California by early settlers has left many traditional cultural practitioners with a fragmented knowledge of the effects and patterns of burning at a landscape scale. There is interest among many California Indian traditional cultural practitioners (i.e., individuals with specific knowledge related to cultural applications of fire) to rekindle long abated methods of fire utilization to achieve conservation and management of plants, wildlife, and cultural resources. Appropriately, the application of such burning practices is valuable to contemporary land managers to achieve similar conservation and management objectives.



Participatory Research Framework

In 2001, I was serving as a steering committee member for Shannon Brawley's (CFRF MA Fellow 2001 and Predissertation Fellow 2003) research project at the Cache Creek Nature Preserve (CCNP) in Woodland, California. The steering committee was comprised of Jan Lowrey, Executive Director of the CCNP, and California Indian traditional cultural practitioners, including myself. During one of our meetings Lowrey inquired about the indigenous management practices for the riparian corridor along Cache Creek. The steering committee responded that prescribed fire was traditionally a very important traditional indigenous management practice along most of California's riparian corridors. Based on prior attempts to implement the traditional use of fire in riparian corridors, many land managers were skeptical of this practice without data on the effects to plants and wildlife. Thus, the steering committee felt that research was needed to better understand the effects of fire on the riparian ecosystem. I developed a study design that involved the implementation of several burn treatments utilizing typical seasonal variations of traditional indigenous fire regimes along with post-burn monitoring at the CCNP and another local site to assess the effects of fire on riparian vegetation and wildlife.

By the spring of 2002, I embarked on a participatory research journey with a well defined community of California Indian traditional cultural practitioners (i.e., individuals maintaining cultural practices including place-specific knowledge with respect to fire), conservation land managers, academics, and a cadre of volunteers. Seemingly the project was off to a fantastic start with a well-defined core of research partners.

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Issues in Conducting Indigenous Fire Research

Conducting fire research in contemporary times inherently demands the involvement of additional players, particularly local fire departments and regional air quality management districts. Having worked for various Federal, Tribal, and non-governmental organizations I was aware of the complexities involved in implementing land management practices such as prescribed fire. However, I had not assessed the extent to which the coordination and participation of local fire departments and regional air quality management districts would conflict with the implementation of fire treatments. Key conflicts in implementing the burn treatments included: 1) scheduled burn days conflicted with actual burn day air quality forecasts and/or local site conditions, 2) fire crew unavailability (primarily for late dry season burning), and 3) miscommunication regarding the extent of the burns. One of the treatments was modified twice prior to implementation in order to accommodate conflicts primarily with the regional air quality management districts. I often found myself at odds in negotiating the nuances of air quality standards, the scheduling of fire crews, and the schedules of other community members. Initially, the implementation of the treatments for this prescribed fire research appeared to be as simple as flicking a match into the woods. It soon became apparent that there was more to prescribed burning in contemporary times than I, and other research participants had anticipated.

The conflicts in implementing the burn treatments would not have been a major concern had they been apparent from the beginning of the research project. Interestingly, the discussed key conflicts surfaced after the first burn treatments had been completed in the fall of 2002. There were many times that I questioned if the research was truly a study of indigenous fire management practices, or if non-indigenous entities were redirecting the implementation of the project. Due to the delays in implementing the second set of burn treatments, it became a necessity to look for alternative methods to complete the research. After coordination with the regional air quality management districts, an additional methodology was developed to enable the research to proceed. The participation and cooperation of the fire departments and the regional air quality management districts made the implementation of this research possible within the framework and policies of state and local bureaucracies. Changes to the methodology also created more flexibility in scheduling burns, and allowed other community members to assist in burn treatment implementation. Ultimately, the treatments were representative of both indigenous and contemporary fire treatment types. Thus, due to the conflicts a compromise to the intended treatment timing and methodology had to be made.

The Outlook

My experiences while conducting this fire research has underscored the importance of continually developing and maintaining relationships beyond the immediate research community. Reflecting on these experiences, it is considerable how regulated we are in implementing fire projects in California. I found this surprising due to the benefits of utilizing prescribed fires to achieve resource conservation and management objectives. I am hopeful that the research project has served as a mechanism to convey awareness regarding indigenous fire management practices. Although it is unlikely that conflicts to implementing indigenous fire regimes will erode quickly, it is likely that exposure to the process will inform future fire planning and policy development, and will ultimately facilitate the restoration of indigenous fire practices.

For additional information please refer to the dissertation:

Hankins, D.L. 2005. *Pyrogeography: Spatial and Temporal Relationships of Fire, Nature, and Culture*

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