



## Research Brief for Resource Managers

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## Burning and Damming to Type-convert Chaparral

Roberts, T. A. 1980. *Approaches to chaparral management for wildlife. Cal-Neva Wildlife Transactions: 112-119.*

The Soboba Project in the San Jacinto district of the San Bernardino National Forest was a collaborative demonstration project with California Fish & Game to improve "a classic case of 12,000 useless acres" of southern California chaparral for wildlife use. This report in 1980 describes the conceptual plan developed after a year of work.

The project **objectives** were stated as follows "In chaparral as in any ecosystem, biomass can be made to concentrate in higher trophic levels. The premise that solar energy can be maneuvered to from the production and maintenance of woody plant tissues into forms more assessable (sic) to herbivores is central to most vegetation management programs for wildlife. We should remind ourselves that chaparral is to be treated as an ecosystem, including both biotic and abiotic elements, and our approaches must match, to the fullest extent possible, its strengths and weaknesses as a natural mechanism for generating animal biomass."

The project **justification** was "We all know by now that the Forest Service policy of vigorous brushland fire suppression has left us with **hundreds of thousands of acres of decadent vegetation**, increased wildfire danger and decreased quality of wildlife habitat. It is a relatively new idea that has

### Management Implications

- This report presents a model for manipulating chaparral sites to be more productive for wildlife.

*rapidly acquired the status of cliché, and I do not think I need to do more than refer to it."*

The proposed "ecosystem based" plan (see their Figure 5, attached) had two components: a **Prescribed Burn Plan** based on vegetation mapping of the site; type-converting the ridgelines to grassy fuel breaks (the Grindstone recipe); and using the Wildlife Habitat Relationships Program to develop prescriptions to optimize the postfire vegetation cover for specific wildlife species, like deer. The second component was an **Oak Silviculture and Topographic Management Plan** to impound drainages and convert the resulting sedimented plateaus to oak groves with an herbaceous understory.

The expectation was that once the impoundments were created, the remaining elements of the plan - prescribed burning, oak silviculture and topographic management - would all "fall within the realm of processes that can and do occur naturally." Roberts concludes optimistically that with this plan "The productive capability of chaparral is maximized based on groundwork that can be sustained indefinitely without any drain on nonrenewable resources."

