

Weaving Nature into Culture

by Barbara Balen

Hidden throughout the Sierra Nevada landscape of manzanita thickets and ponderosa pine forests is an older landscape of native plants seemingly growing together like an untended garden. These remnant pockets of plant populations are like windows into a time when the Me-Wuk, the first stewards of the Sierra, took an active hand in encouraging the web of life upon which they depended. Although these landscapes are barely observable, they have just the right mix of sunlight, water and plant life to give one the sense that the forest floor is alive. Within these areas are numerous edges, where one plant type interfaces with another like puzzle pieces. Edges or *ecotones* are also advantageous to animals that need both open areas for feeding and canopy cover for protection.

These pockets of remnant plant populations are intriguing to ethnobotanists who study the relationship between people and plants. They are also where the Me-Wuk, who continue to practice their traditions, go to gather plants for medicines, fiber and food—for example, mushrooms, wild onion and watercress.

The Sierran Me-Wuk were born into a culture where botanical and ecological knowledge was indispensable. Traditional knowledge passed down orally contained a vast body of information for each plant. Where did it grow, what was its use, what part was harvested? When was it gathered, how was it stored and processed? Where did it grow *best* and how were the growing conditions enhanced (by fire or pruning, for example)? Especially important was the knowledge of how to travel in tandem with plant bloom periods to ensure a local supply (e.g. people moving at the same speed as the plants were flowering up the western slope). Without resorting to irrigation, the Me-Wuk depended heavily on draught tolerant landscapes and, like the native plants themselves, they survived times of extreme draught.



Me-Wuk elder, Phyllis Montgomery discusses mushroom gathering with Dr. M. Kat Anderson, USDA, NRCS, National Ethnoecologist.

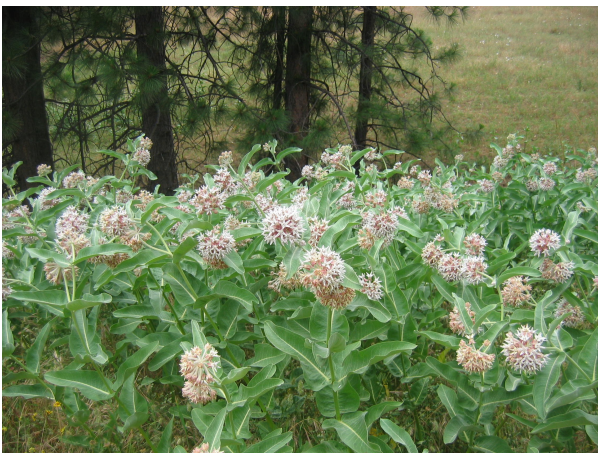
The implication of what the Sierra must have looked like under the hand of indigenous stewardship is significant. More than focusing on endangered species, the Me-Wuk understood how to optimize natural systems for multiple benefits for over 2,000 years.

This is enough time to shape a landscape, and for plants and animals to adapt and depend on human-ignited fire and other strategies. Frequent burning of the Sierra by human inhabitants is supported by tree ring data. Fire scars on tree rings show fires at more frequent intervals than naturally-occurring lightning strikes. Fires cleared out the understory and maintained the edges.

Another indication of indigenous stewardship is seen in the quality and uniformity of basketry material in museum specimen baskets. Native weavers and ethnobotanists have concluded that the basket makers must have tended large colonies of plants in order to produce stalks of such uniform diameter, length and color. Scientific evidence corresponds to what Me-Wuk elders have said all along; *we took care of the land*.



Signs of an older landscape: an ancient decomposing black oak, once spreading its limbs in full sun, is now being replaced by young, water demanding conifers. These ancient fallen oaks tell the story of an older drought tolerant landscape that the Me-Wuk enhanced by burning.



Asclepias speciosa (showy milkweed) colony at a Me-Wuk habitation site. Cultural uses were utilitarian. The dry stems were processed into fine cordage for netting, rope, regalia and snares. After contact with foreigners, it was used to treat venereal disease.

Without realizing it, we have inherited a culturally-dependent Sierran landscape that has a phenomenal capacity to support not only natural systems, but human systems. Through ethnobotany we can reconstruct a landscape's carrying capacity, not to go back in time, but to go forward with new insights in how to manage for plant and animal diversity.

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