# Grasslands and Oak woodlands

The grasslands of California were invaded by non-native annual grasses from Spain very quickly after the arrival of Spanish missionaries in 1769. Because this transformation happened before large scale surveys of vegetation were conducted, the composition of grasslands before European arrival remains largely unknown. The best available evidence currently suggests that California grasslands were probably open prairie with perennial bunchgrasses interspersed with annual wildflowers. Early accounts from explorers of grasslands across much of the central valley mention amazing wildflower displays that for the most part have disappeared. We recommend that this habitat type be depicted during the peak of the growing season when these wildflower displays would have occurred (March-early May).

Explorers also recount that wildflowers were intermixed, but that dominance by one species often occurred over large areas. Because of this, on a single hillside, you could see a large patch of yellow goldfields, with another area dominated by purple Lupins, creating a patchwork appearance. I am including some photos from the grasslands in and around the Tehachapi mountains as a guide to how this patchwork might have looked – this is the only place I know of where displays like this still occur today. We recommend depicting a short list of one dominant and four other two-species codominant mixtures in large patches of several hectares in size. Within patches, the dominant should occur at an abundance of 50% or more, and elsewhere, it can be rare or absent. Two-species mixtures can be evenly mixed to make up a total dominance of 50% or more. We are also including a list of a few other common and rare species that can be interspersed throughout the habitat type at low abundances of 1-10%.

Google earth images – See oak woodland packet for google earth pointer to Los Vaqueros watershed to see how grassland intermixes with oak woodland.