



## LIVERMORE GRASS

Since the first humans arrived about 10,000 years ago, the majority of people who have interacted with the Livermore area landscape have been engaged in exploiting and/or managing animals that harvest grass.

The climate that greeted those first inhabitants has changed. The grasses and other range plants have changed.<sup>1</sup> The animals have changed.

Now, with recreational use supplanting agricultural use, the wildlife like antelope, deer, elk and moose, or 'lifestyle' animals like horses and llamas (even if their existence is more for our pleasure than sustenance) are still harvesting grass – probably too much, in fact.

A truly holistic understanding of the symbiotic relationship between humans, grasslands, grazing animals and the people that depend on their meat and skins has been imperfectly grasped throughout the time of human occupation of the Livermore area.

Paleo Indians are widely thought to have hunted most of the original mega fauna to extinction – maybe in as little as a few hundred years.

Proto-historical Indians created terrible waste (and animal suffering) by driving bison herds off buffalo jumps (like the one on the Robert's Ranch). They also systematically set fires that altered the landscape and hastened erosion in an effort to influence grazing behavior. Even though fire is a natural part of grassland eco-systems, I think it is hard to argue that fires intentionally set by humans are truly "natural."

Fur trappers (frequently with the help of Indians) wreaked havoc on riparian areas dependent on the beaver.

Buffalo hunters brought the vast herds to the threshold of extinction in quest of hides and tongues.<sup>2</sup> When they were done, the bones were picked up and shipped off.<sup>3</sup>

Next, drovers from Texas, New Mexico, Idaho and Oregon overstocked the ranges recently occupied by the buffalo – first with cattle, later sheep.

Debilitating damage of the northern ranges may have been narrowly averted by the great blizzards of 1886 that killed something on the order of 80% of the cattle from Canada to Texas and proved the unsustainability of the open-range cattle operations of romantic legend.<sup>4</sup>

More intensive husbandry of cattle and sheep on the smaller homestead operations that followed provided relief for some grassland eco-systems – those that weren't plowed under. Except, as in the Livermore area, where the homestead areas were bordered by large tracts of unclaimed lands. Here another range rush was on as everyone raced to get their (un)fair share of free grass in the mountains.<sup>5</sup>

The regulation of the national *commons* by establishing limited grazing allotments on the National Forests/Grasslands and Bureau of Land Management lands before and during the Great Depression averted catastrophe, but not before a lot of damage had been done. In the Livermore area, almost all US public lands are controlled by the Forest Service.<sup>6</sup>

What with the vagaries of weather and prices, the range livestock industry is never really stable, but homesteading and the establishment of grazing allotments brought some measure of stability and sustainability to small-scale ranching in the Livermore area by the end of World War I.

That stability, together with relatively mild winters, plenty of shelter and irrigation water for raising winter feed, made the Livermore Valley particularly suited to the survival of small family ranches until the 1970s. Then came the developers.... and climate change.

Now, as Livermore transitions from ranching to small recreational landholdings, it looks more likely than not that the area grassland eco-system will deteriorate.

<sup>1</sup> Due in no small part to the intentional and unintentional introduction of non-native species by European settlers.

<sup>2</sup> Because the Great Plains 'pot' had been so violently stirred over the previous three centuries as a result of the tidal effects of European contact – disease, the introduction of the horse, Indian tribes migrating from the east and inter-tribal warfare, sometimes reaching genocidal levels – it has been difficult to assess how 'natural' the plains ecology that Lewis, Clark and other explorers encountered in the early 19th century really was. Some say that the buffalo population might have approached unsustainable levels following a precipitous drop in the population of their principal predator – the Indian – due to the ravages of smallpox.

<sup>3</sup> An old friend of mine, John Mattingly, argues that the removal of the bones of the animals that graze the grass, ultimately deprives range lands of a critical nutrient, phosphorous. If the animal dies *in situ*, the bones will eventually return their nutrients to the soil. If the animal is hauled off to a packing plant for slaughter, the bones are gone, together with their phosphorous. The logistics and cost of applying phosphorous fertilizer to range land would be prohibitive.

<sup>4</sup> Ironically, the 'true' old-west with all of its icons and lore lasted barely more than a decade, ending in bankruptcy for many of its cattle barons – including among them Teddy Roosevelt.

<sup>5</sup> This manifestation of the principle problem inherent with unregulated *commons* had been addressed under English law, wherein *commoners* were permitted certain limited grazing (and other) rights. If the grazing rights were over-used, the offending herdsman was *stinted* (limited further).

<sup>6</sup> Any rancher who has had to deal with the US Forest Service or the BLM will voice their frustrations from experience – including me. It is hard to accept that agencies steeped in such mind-numbing bureaucracy and inefficiency have any business messing with ranchers and their livelihood. However, I'll admit history argues otherwise.



Blue Grama, *bouteloua gracilis*