

INTRODUCTION

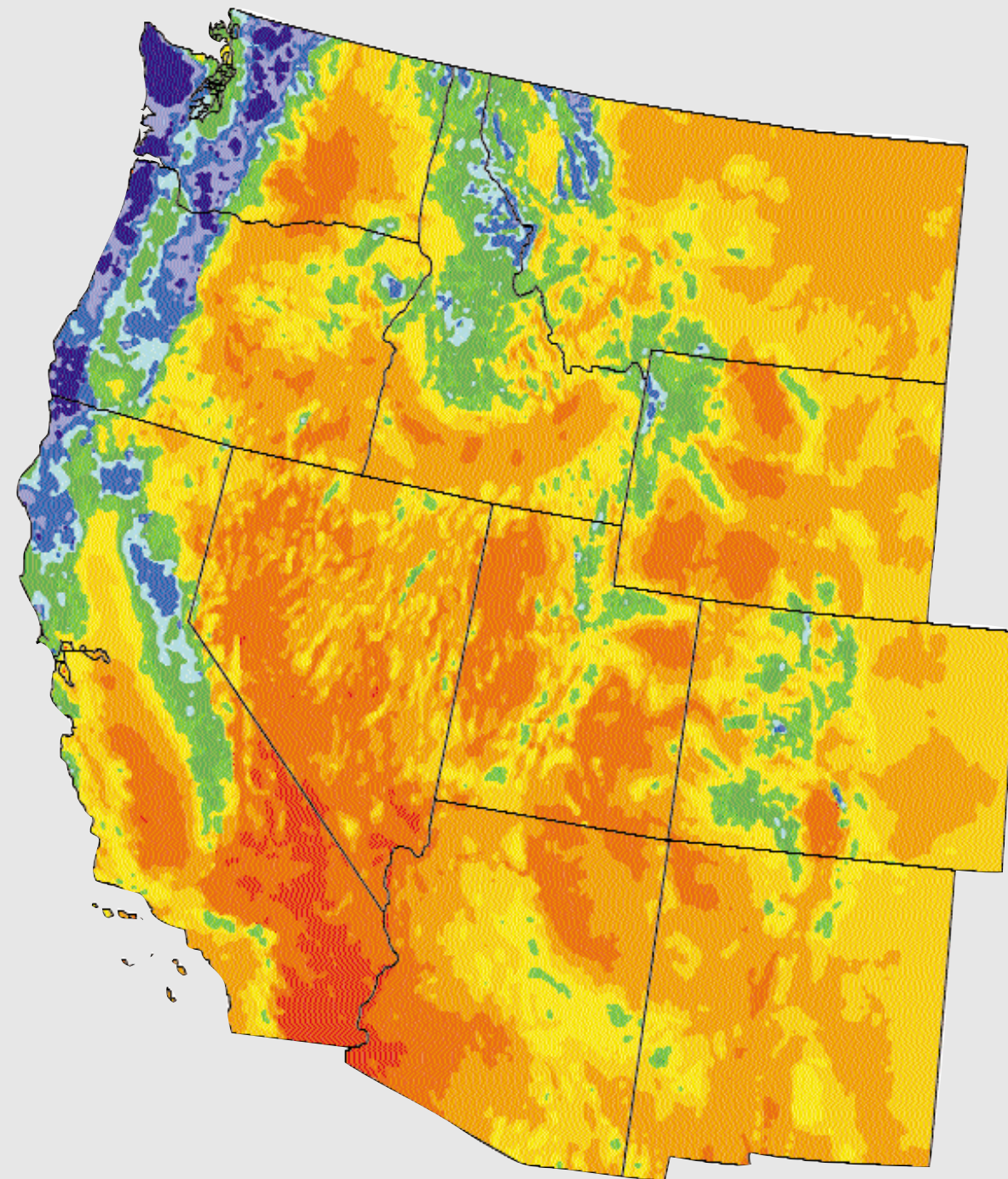
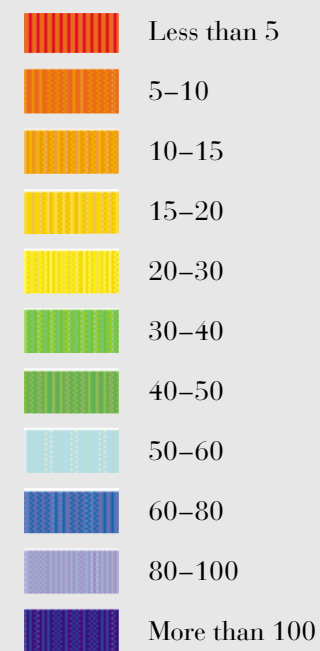
AVERAGE ANNUAL PRECIPITATION

WESTERN UNITED STATES

Period: 1961–1990

Units: inches

Legend (Inches per Year)



Three hundred million acres. That is what is at stake. In round figures, some 300 million acres of public lands—federal, state, and county—are currently leased for livestock production. This figure includes some 90 percent of all Bureau of Land Management holdings, 69 percent of the lands managed by the U.S. Forest Service, plus national wildlife refuges, national parks, and other nature preserves. The combined area is as large as the entire eastern seaboard from Maine to Florida, with Missouri thrown in! And 300 million acres is what potentially could be restored if public lands livestock production were eliminated. Nowhere else in the United States is there such potential for large-scale ecosystem restoration at so little cost—and ultimately affecting so few people—as in the termination of domestic livestock production on our public lands.

Although the impacts associated with livestock production vary from region to region, and even from ranch to ranch, there is overwhelming evidence that livestock production has impoverished the West's biological capital. This damage is not confined to the public lands. Most of the private lands in the West are devoted to livestock production in one way or another, and suffer equally from environmental degradation. Public values—such as clean water and healthy, abundant wildlife populations—are diminished by poor land use practices in the private sector. When discussing livestock production and the threat it poses to the natural heritage we share as a society, this book focuses primarily on public lands grazing, but we must also consider a more complete picture—an industry operating in both the public and private arenas, extracting private profit while depleting public resources and jeopardizing natural systems.

Subsidies

Whether on public or private lands, the western livestock industry is subsidized in multiple ways. First, there is the abundance of federal and state funding that props up the industry, including below-market grazing fees, emergency feed programs, low-interest federal farm loans, and many other taxpayer-funded programs.

Even more important are the environmental costs—most of them not counted in any way, and certainly not absorbed by livestock producers. These costs include soil erosion; degraded water quality and the costs of cleanup; the spread of exotic weeds and the subsequent reduction in plant community productivity; and the costs of saving species endangered by livestock production.

Finally there are the social costs resulting from beef consumption. Though the subject is beyond the scope of this book, a heavy meat diet contributes to numerous health problems that society pays for directly and indirectly, from higher costs to reduced life expectancy.

The Cost of Aridity

Though this book strives to make the case that public lands livestock production should cease, we hasten to say that ranchers are not bad people. They are pursuing what they consider to be an honorable occupation, striving to provide products they believe America needs and wants. Nevertheless, as we hope readers will agree, the costs of running this industry in the arid West are simply too high. Ranchers are struggling against insuperable geographic limits. It is our view that western ranching cannot now, nor ever will, be made ecologically benign, sustainable, or profitable because of the scarcity of the most enduring and powerful ingredient for all life—water.

The West is a land of steep and rocky mountains, deep canyons, and vast, open spaces. It is also a land of aridity. The major focus of this book is that dry realm between the Sierra Nevada and Cascade Ranges on the west and the tallgrass prairie on the east. Not only is this area home to all of the United States's official deserts—including the Mojave, Sonoran, Great Basin, and Chihuahuan Deserts and the Colorado Plateau—it is also home to semiarid grasslands, such as the Palouse prairie and the Great Plains. And in addition to their lack of precipitation, these areas also have highly variable patterns of precipitation. To paraphrase the great western historian Walter Prescott Webb, the prevailing climate of the West is drought punctuated by occasional periods of wetness.

There is a direct correlation between moisture and plant productivity. The more moisture an area receives, the more biomass the land can produce. The West is not nearly as productive as the more humid, wetter parts of the country. Nor are these dry lands nearly as tolerant of abuse as more moist environments. Damage occurs more easily. And recovery takes longer—if it occurs at all.

The rugged terrain and arid conditions impose limitations on what ranchers can do with domestic livestock, and on how much they can spend to mitigate the negative impacts associated with livestock production. To have enough forage for a viable cattle operation, ranchers must own huge spreads—or have access to large areas of cheap public grazing land. Indeed, in some states like Nevada, it may require 250 acres or more to support one cow for a single year. Meanwhile, in a place with a relatively moist and warm environment, such as Mississippi or Missouri, a rancher can sustain a cow year-round on a single acre. Western ranchers can compete with livestock operators in higher-rainfall regions only because western operators have had almost unlimited access to free or cheap forage.

Grazing livestock over huge expanses brings huge expenses. It costs more for fencing, because the amounts of materials and hours of labor needed

are greater. It costs more to get cattle or sheep to market, because ranchers have to hire “semi” trucks and drive hundreds of miles to transport stock. It costs more time simply to drive out and check on livestock, as well as to monitor the well-being of the range. It costs more money to put in irrigation systems and build reservoirs. It costs a great deal to guard livestock from predators, or even to hire someone to kill predators. Ranchers have squeaked by, in part, because they’ve managed to avoid paying many of these costs, transferring them instead to the taxpayer or to the land itself. These days, the livestock industry is being asked more frequently to pay the real costs. The public—and perhaps some ranchers as well—is discovering that the meager amount of meat produced on western rangelands cannot justify the costs of operation.

Another consequence of aridity is that cows, widely distributed over the landscape to get adequate forage, are harder to protect from predators than livestock grazing the back forty and being called in to shelter in a barn every night. It is not feasible nightly to round up, or even patrol, an entire herd of cows on the typical western grazing allotment. The ranchers’ solution has been simple, and devastating: get rid of the predators. Thus, wolves were wiped out in the West, as were grizzly bears—except for a few, isolated strongholds; mountain lions continue to be persecuted; coyotes are killed by the tens of thousands every year; and even smaller predators, such as foxes and eagles, are frequently resented and sometimes shot.

Because of aridity, western livestock operations are nearly all dependent on irrigated pasture and hay production. Such irrigation results in the dewatering of rivers and the pumping of groundwater away from natural springs and seeps. The livestock industry’s thirst for water also requires the construction of storage reservoirs that fragment river systems and change water flow regimes.

In moist landscapes, plants can recover their reserves after grazing if given a rest of a few months. In the arid West, rest in the middle of a drought is not granting any recovery. To make matters worse, during drought periods ranchers must graze even more acreage to make up for the land’s lower productivity. It is a situation that nearly guarantees a cycle of land degeneration.

Aridity also affects how livestock use the land. Cattle evolved in the moist woodlands of Eurasia. As a result of their natural tendency to congregate near water sources and dense vegetation—in the West, primarily found in streamside areas and around seeps and springs—cattle do an inordinate amount of damage by trampling vegetation and soils, stripping plant material, breaking down stream banks with their hooves, and fouling water with their wastes.

The Costs of Mitigation

Some livestock proponents argue that the negative effects of livestock can be mitigated. For example, to keep livestock from damaging riparian zones (those thin green bands of water-dependent vegetation found along streams and springs), proponents advocate fencing. This proposal, however, has numerous problems, not least of which is that there are literally hundreds of thousands of miles of riparian area in the West. Fencing even a small portion of the total would be extremely costly. Furthermore, fencing of riparian areas still leaves many small seeps and headwater streams subject to the pounding of cattle hooves and the stripping of vegetation by bovine vacuums. Plus, fences become barriers to the free movement of wildlife.

Other supposed solutions, such as pumping water from seeps or springs to water tanks or troughs, create other problems. For example, rings of nearly bare ground usually appear around water developments as entire herds of livestock descend on them. These sacrifice zones become compacted, with many native plants driven out, to be replaced by exotics and tough, unpalatable plants. As for the removal of the water itself, it requires only the simplest logic to realize that with less water in a spring or stream, there is less habitat for water-dependent native species. Even if no cow goes near a stream, the diversion of water to stock tanks and the like means survival becomes trickier for trout, for willows, for frogs, for water ouzels.

Finally, who pays for this mitigation? Ranchers, already operating under marginal economics, cannot afford to pay for mitigation measures. So, then, the taxpayers do. And why should they bear the costs?

No matter whose pocketbook the money is coming out of, it doesn’t really make sense to invest in making the arid West a better cow pasture. With so many other areas—outside of this dry, rugged part of the country—where it is possible to raise livestock without such massive manipulation, infrastructure, and cash outlay, the question of why anyone should participate in or support such foolishness looms larger than ever.

Livestock’s Contribution to Biological Impoverishment

As in any work that takes a broad overview of a topic, there will always be exceptions to the points being made. Livestock proponents like to point to a few exceptional ranching operations, then try to portray them as feasible, sustainable, and environmentally benign, if not representative of how the industry as a whole currently conducts itself. We respond by stating that no ranching in the West is environmentally benign, but even if there are a few exceptional operations, they don’t invalidate the general rule: that livestock production in the arid West has contributed to major biological impoverishment.

Livestock production, by its very nature, is a domestication of the landscape. It requires using the bulk of water, forage, and space for the benefit of one or two domestic animals—at the expense of native creatures. Although this is characteristic of agriculture everywhere, the expropriation of resources for the raising of livestock is particularly egregious in the arid West because natural productivity is limited and highly variable. The majority of the West is directly or indirectly influenced by livestock production, either as rangeland, as cultivated land or pasture growing feed for livestock, or as delimited reserves of nature where naturally migrating wildlife are persecuted the instant they step outside the boundaries people have imposed on them. If you add in the hundreds of millions of acres of farmland in the Midwest devoted to the production of livestock forage, it’s clear that the total physical and ecological footprint of livestock production is enormous.

A Choice

The issue of western livestock production is largely about the wise use of resources. Contrary to the prevailing myth of the West, the majority of cattle are not raised here, but east of the hundredth meridian. Missouri grows more beef than Montana. Louisiana is a bigger cattle producer than Wyoming—the “Cowboy State.” And tiny Vermont produces more beef than all the public lands in Nevada. Given the small percentage of meat produced off the vast

western range and the tremendous costs to native ecosystems as well as to taxpayers, who indirectly and directly subsidize the western livestock industry, any amount of commercial livestock production here is difficult to justify.

The elimination of livestock grazing on public lands in the West would be of very little consequence to the overall meat supply of the nation. As is discussed later in this book, the number of people whose livelihoods would be adversely affected by ending grazing on public lands is remarkably low, and even then, probably a good many ranchers on public lands would have the option of turning solely to private lands to continue their operations. Without the crutch of cheap public lands forage, some ranchers might turn to innovative ventures on their private spreads. This is already happening in parts of the West. For example, although the history of dude ranching goes back nearly as far as that of western ranching itself, these days more and more ranches are offering opportunities for outdoor recreation, as well as nature observation and environmental education. The hard fact for some is that an outside income—selling insurance, working as a schoolteacher, and so forth—is already a necessity, whether a public lands grazing permit is tied to the ranch or not. The number of permittees who would face financial ruin for the sole reason that their public lands grazing had ended is likely very small—and far lower than the number displaced by the typical corporate downsizing move.

Still, it is possible for our society to show compassion and generosity to public lands ranchers while at the same time acting to protect and restore the ecological integrity of western landscapes. Keep in mind that society legally owes public lands ranchers nothing. Grazing on the federal lands has always been a privilege, not a right, and permits have always been subject—theoretically—to revocation if environmental damage is deemed significant by the managing agency. However, the reality is that for over a century, the public lands have been neglected and abused. Government officials have been thwarted from standing up to politically powerful ranchers (if that were even an inclination in the first place). And the interaction of the banking industry and the livestock industry has resulted in real monetary value being attached to public lands grazing permits that are associated with specific ranch properties.

Thus, a variety of proposals for phasing out livestock grazing on public lands are now being developed and discussed. Some are explained near the end of this book. Most involve trading retirement of public lands grazing permits for some type of one-time transition payment to permittees—whether funds come from federal sources or from private organizations.

In light of the marginal nature of western ranching, the ever-growing economic pressures on the western livestock industry, and the burgeoning desire of the public to see the public lands serve truly broad, collective interests—including that of the natural world itself—we hope that ranchers will begin to see that the time has come to close this chapter in the pageant of the West. We hope they will see that a new chapter on the western public lands is unfolding, and that they have the power to participate positively in how the story proceeds. Or they can resist and deny—as has been the case for too long—and then forces beyond their control will likely wrench matters out of their hands in the end, anyway. We ourselves do not know whether such a scenario would lead to more beneficent care of the land. Perhaps narrow, though different, interests would prevail again, taking the resources of the West for self-serving purposes. It is, after all, a familiar western drama.

We do know, however, that there is today great opportunity to salvage and restore a West of true wildness, for all people and for all the species that inhabit this land. There is yet time to renew a West of clear-flowing rivers rippling with trout, a West of hills undulating with large and elegant herds of elk and bison, bighorn sheep and pronghorn antelope. There is still a chance. We can call back the mighty grizzly, the darting black-footed ferret, the loping wolf, the gregarious prairie dog. Three hundred million acres of public land in the West is one of our best hopes—perhaps the last, very best hope—for setting aside a portion of our continent that not only protects a magnificent landscape, not only harbors a remarkably rich diversity of plants and animals, but also honors a land of the imagination and the human spirit.

Before America was a land of settlers, of pioneers, before it was dreamed of as a land of empire and conquest, it was another kind of place. It was home, and it was sacred landscape, at one and the same time. Here resided creatures and powers to be revered and respected. Although much has changed in the last half-millennium, some things have not. Our human longing for a world beautiful and big and beyond our measuring lives on. The western lands held in trust for all of us still offer the chance to know, to experience, an immeasurable and mysterious yet dazzlingly real world.

These lands are under siege, and much is lost and irretrievable. This book is our call to alarm. Yet, ultimately, we work for what is still here, for what may yet be again. The arid West is a land of limits; this we have said, and what follows in this book should make that abundantly clear. Yet limitations can produce innovation; limitations can drive creativity, in human societies as in nature. Our society sought to make the West over, to make it into a place we carried collectively in our minds, from ancient memories and cultural myths. Now, as our society presses against the ecological limits of the West, it is time to create a new story, one that better matches the physical boundaries of this place. Just exactly how that new story should go is not yet clear, though we are suggesting its outlines.

Our foremost recommendation, the plotline we see most clearly for the new story of the West, is to end the wasteful, destructive, tragic abuse of our public lands by the livestock industry. It is a very tall order; to some, it no doubt sounds extreme. But, there simply is too much at stake—some 300 million acres of land at stake—to settle for some weaker, less ambitious option. That has been tried—the history of grazing reform is distressingly redundant—and today, while more species are in more dire straits than ever and some places are on the verge of ecological collapse, livestock proponents are still fiddling with grazing schedules and stocking rates, building this water development or that fence, looking for that elusive, perfect management scheme that will, at last, make cattle and sheep benign beasts in this irredeemably parched land. How many more chances, at how much cost, should the public allow ranchers and public range managers? How many more species do we care to see become endangered, or extinct, before we, the owners of the public land, say it is time to give up on trying to develop the kinder, gentler cow and instead focus on fixing the damage that has been done, and on putting our western landscapes back together?

How much more time before the public reclaims the western public lands? We, of course, hope that it is very little time at all.