



Thad Box

Drought and Sustainability

Men stood by their fences and looked at the ruined corn, drying fast now, only a little green through the film of dust. The men were silent and did not move often. And the women came out of the houses to stand beside their men—to feel whether this time the men would break. The women studied the men's faces secretly, for the corn could go as long as something else remained. The children stood near by, drawing figures in the dust with their bare toes, and the children sent exploring senses out to see whether men and women would break...Horses came to the watering troughs and nuzzled the water to clear the surface dust. After a while the faces of the watching men lost their bemused perplexity and became hard and resistant. Then the women knew they were safe and there was no break. (John Steinbeck, Grapes of Wrath).

The die-ups of livestock in the late 19th century are part of our range management lore. Dorothea Lange's haunting photographs of the Great Depression give us a hint of human suffering during drought. And John Steinbeck, in his great American novel, spells out what happens when we exceed the basic carrying capacity of land—when sustainability is ignored for corporate gain.

To me, “the drought” is that of the 1950s. I take that one personally. It is not so much that it turned me from a rancher to a school teacher. I can't forget the image of Dad sitting in that hot auction barn at Lampasas, Texas, watching his brood cows sell. And the tear that ran down his sunburned, dusty cheek.

The profession I chose exists because of drought. Or maybe, more accurately, because the first European pioneers misjudged what a land with so little rainfall could support. We continue to approach each new drought as if it is a disaster rather than the norm, ignoring the past, and paying only lip service to sustainable uses of naturally dry rangelands.

We study in detail the droughts of the last 150 years. But tree ring studies and archeological evidence show there have been 2 or 3 droughts per century greater than the one that caused Dad's tear trail to be etched so vividly in my brain. If America's western rangelands are to be sustainable, we must reassess the water that falls on them and the lifestyle uses we demand from them.

We know a lot about rainfall for the past 100 years. But from Elephant Butte, New Mexico, to Lake Mead, Nevada, to Jackson Lake, Wyoming, reservoirs are near empty. White sediments on sandstone ledges mark where water once stood at Lake Powell, Arizona. Acres of sand surround Bear Lake, Utah. In a few years, drought depleted the water storage behind dams old enough to have historical status.

News media decry economic loss to farmers, applaud ideas for xeriscaping yards, and list ways to save water. Some suggest importing water from Canada. Cities, states, and countries litigate compacts that allocate more water than streams flow.

Dry reservoirs are metaphors for our propensity to live beyond our means, our tendency to use temporary surpluses as if the bounty of good years and windfall profits are normal. Once addicted to living beyond our means, we borrow against an imagined prosperous future that history tells us has never happened—and the probability of it ever occurring is low.

Credit card debt and personal bankruptcies are at all-time highs. Local and state governments, required by law to balance the budget, search for ways to put current expenditures into the future. Federal budgets run deficits in the trillions—debts built up by a president and a party that claim to be conservative. Politicians dare not demand we live within our means lest they lose the next election.

Our water shortage should surprise no one. Scientists published volumes showing we use more water than falls in the West. Archeologists speculate that whole cultures of people—large cities and many villages—became extinct in the western states because of drought.

These facts inspired leaders of yesteryear to build storage facilities to capture the excesses of high rainfall years and make them available during bad years. As water stacked up behind dams, we did not accept stored water as a bank account to get through bad times. It became venture capital to make development bloom in the desert. Las Vegas is our fastest growing city because the most reckless gamblers are not in casinos, but in development offices.

“It will rain, and reservoirs will fill” is a hopeful prayer, not fact backed by history or science. No one knows what happened in the Range Creek, Utah, villages where Fremont people disappeared in a dry period some 1,300 years ago. No one knows what will happen in the American West if drought continues another 5 to 20 years.

What we do know is that our current level of development and our lifestyle are not sustainable. We used up half a century of surplus water in one historically short drought. If drought continues, or weather patterns change because of global warming—both predicted—the economy and culture of the West must change significantly.

The first attempt to maintain our overindulgent appetite is conservation. Water-saving toilets and gravel lawns are like smiley-face-decorated bandages on our ruptured jugular vein. Attempts to “produce” water through drilling into non-rechargeable aquifers and using technology to make brackish water fresh may slow the hemorrhage. But ultimately the

economy must readjust to a level that can be supported by the annual amount of water available. The West is not sustainable if we use more water than falls from the sky.

Readjustment to live with our water supply will be difficult: First, we Americans are addicted to living beyond our means—credit cards maxed. We do not set aside surpluses for bad times or provide stability for the next generation. Second, leaders promise that growth will bail us out and pay off our debts. Third, growth means getting bigger. Getting bigger increases consumption and exacerbates the problem through more demand for limited water. Until we redefine growth as increasing quality rather than getting bigger, the West—and perhaps our country as well—is on a downhill slide. No one knows when we will hit bottom.

So what does this have to do with us range folk? Rangelands evolved in this dry, drought-prone environment. Organisms developed ways to conserve moisture, stay dormant during drought, and survive. Not only did plants and animals survive, they built amazing, productive, and beautiful communities.

Range managers are trained in understanding the carrying capacity of dry environments. We know the inevitable disasters that occur when carrying capacity is exceeded. We understand the modifications nature made for plants and animals to live through drought. We know intellectually, and personally, the joys and sorrows of surviving in dry areas.

There is no other group that has both the scientific training and personal attachment to drought-prone areas. But to accept this broad role, we must master complex problems of the interconnectedness of modern people and an overused land—from geology to ecology to sociology to economics to philosophy to politics. And we tackle these messy problems without fear.

The women watched the men, watched to see whether the break had come at last. The women stood silently and watched. And where a number of men gathered together, the fear went from their faces, and anger took its place. And the women sighed with relief, for they knew it was all right—the break had not come; and the break would never come as long as fear could turn to wrath. (John Steinbeck, Grapes of Wrath).

Where is our outrage? Where is our anger? ♦