

Thad Box

Tracks Left While Muddling Through Overlapping Borders

n July Jenny and I attended a reunion of her paternal (Price) line in Springfield, Oregon. We drove west from Logan, across green fields watered by streams flowing from nearby mountains. We saw cattle and sandhill cranes forage together. In the Bear River wetlands, giant white pelicans swam alongside small grebes. Gulls, ibises, geese, and ducks dotted the marshy landscape.

Westward, the country dried quickly. Abandoned homesteads, surrounded by dying trees, formed islands in desert sagebrush. Large swaths of dry-farm crops cut across valleys where snowfall leaves moisture enough to mature wheat. Permanent homesteads and villages existed only where permanent water occurred.

Areas between waters support cold desert shrub—sagebrush, saltbush, greasewood—plant communities determined by soils and past use. Vast areas have only short, dry, annual plants. Cheatgrass, medusahead, tumbleweeds, and halogeton fill scars where fire has burned native vegetation.

There invasive species suck scarce moisture from the soil, preventing the natives' return.

This pattern repeats itself across northern Utah, through Nevada, Idaho, and Eastern Oregon. Large, prosperous cities like Boise, are dependent on limited water resources. Most of the people live in, and the political power resides in, these urban areas. Towns like Logan and Bend, Oregon nestle near mountains where local streams give their life blood.

Privately owned land around water is subdivided into lots and ranchettes.

Houses dot the landscape.

In small towns like Snowville, Utah, and Glenn's Ferry, Idaho, locals work their farms and ranches. Their children find jobs servicing Interstate Highway travelers. And between these stream- and highway-supported settlements feral horses compete with native pronghorn and domestic livestock on heavily humanized rangeland.

Farther west, near the mountains, desert shrubs give way to juniper, then ponderosa pine. Holiday homes and recreation facilities, obviously not built with money earned from the land, compete with manufactured houses on areas near streams or towns. Recreational vehicles and boats are seen more often than cattle. Big-box chains crowd out local hardware stores and grocers. Lumber mills sit vacant.

On the western slope, the highway winds through huge trees that crowd out the sun. Our country depended on ancient trees cut to supply lumber and paper to grow our country and to fight our wars. Now second- or third-growth trees cover vast areas with a thick blanket of green. Much of this is public land.

Blocks of private land have narrow roads piercing the trees. Dozens of mailboxes at each entrance testify to houses unseen in the forest.

People, and political power, are concentrated in towns and cities west of the summit.

At the family reunion, we examined genealogy records and listened to old timers tell about their lives. Documents show that their ancestors came to America before the American Revolution. Land drew them west across the Appalachians to Tennessee and Kentucky. They built flatboats and floated down the Ohio and Mississippi Rivers, taking up land in Mississippi.

The next generation migrated to east Texas. When the Civil War destroyed their plantation economy, they moved farther west to drier areas. There small farms were unable to support a family. No one alive remembers those moves to acquire new land.

But some remember the Great Depression and the forced move, not to acquire land but just to earn a living. A sibling went west and found work digging irrigation canals in the Imperial Valley of California. Others followed. Soon, only one brother and memories were left in Texas.

The work was hard and paid little. But they had a job. Their kids went to school. They watched "Grapes of Wrath" refugees from cropped-out land camp along the river and then move on, hoping for a job—any job.

Then one of them went to Oregon, where there were jobs in timber and paper mills. Others followed. Trees, cut, sawn, and shredded provided money to educate their children, to buy a little land, to build a house. The clan produced three generations as trees were cut and a global economy was created. They produced journeymen in productive trades, war heroes, and professionals who graduated from universities. A good life was built with bounty from the land. Though few farmed, they rose from poverty because of the land. Old growth forests turned to housing tracts and mountains covered with young trees.

Their family story is an All-American saga of a people learning to live from and with the land. But the story is not one of individuals planting seed and harvesting. Or hunting. Or herding. Or even the taming or pillage of a virgin wilderness. It is the story of humankind's role in a complex process that tested boundaries: physical, cultural, political, and economic. It is a ballad in which the sound of the land becomes more faint with each generation.

This issue of *Rangelands* is about transcending borders. Three years ago I wrote: "Our individual contribution can be as earthy as shoeing a horse on a border ranch. Or as basic as developing ecological principles at a land-grant university. Or as practical as making a range management plan. Or as complex as finding the place of gum arabic in the global economy. Taken together, our actions collectively make us a people without borders—*sin fronteras*."

Actions of land-care professionals, considered collectively, do indeed form a force without borders. But as individuals,

each of us is confined by a collection of boundaries we must recognize, understand, bend, and perhaps breach if we are to create sustainable communities.

Some boundaries arise when our training as physical and/ or biological scientists misleads us. To document the effects of soils on "natural" plant communities, I once studied four distinct but adjacent plant communities in a single pasture. Rainfall, grazing pressure, etc. had been the same for decades. I did intensive plant and soil analyses and statistical tests on both sides of clear and abrupt ecotones.

Only one community was edaphically different. Soils in the other three were not significantly different. One area had been roller chopped about 30 years earlier. Another had been scraped clean when an unsuccessful oil well was drilled. Three of the four plant communities were the result of unrecorded human activity that occurred before I was born. What I thought were natural plant communities were humanized relicts.

Political boundaries between counties, states, nations—or even Ranger Districts—reflect policies and cultural boundaries of humans.

Satellite images of Haiti following the devastating earthquake show very different land cover between Haiti and the Dominican Republic. The soils and potential vegetation on each side of the line are similar. The human attempt at survival converted the Haitian forests to gardens and houses.

Humanized landscapes can last for millennia. While doing a reconnaissance range survey in Arizona, a respected Hopi elder and I ate lunch overlooking a grand vista. Earlier in the day he had told me this place was new to him. Yet he accurately pointed out distant spots where villages of the ancients once existed. He could do so because of subtle differences in vegetation even though there was little physical evidence a settlement had been there thousands of years earlier.

New economic boundaries arise daily as financial systems fail in a global economy. Climate is, and was, changing long before global warming became a media issue. Those rapidly changing boundaries overlap and mingle with cultural, political, physical, and biological borders.

In the past 400 years European immigrants formed a new American breed that humanized every square mile of this continent. In the search for sustainability, our intellect and our efforts must operate *sin fronteras*. We must recognize and understand each border, *cada frontera*.

We must dare to use our expertise to manipulate interconnections, to transcend borders, and to become a sustainable planet for those of us lucky enough to be a *Homo sapiens*, or we will evolve into *H. somethingelse*.

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