The Quivira Coalition

Journal

Fostering a Land Health Movement

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Crossing Divides

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From the Editor's Desk

We are all familiar with poet Robert Frost's famous line that "good fences make good neighbors." But in "Mending Wall", the line is spoken not by the narrator but by his neighbor, a farmer, and it is the only thing his neighbor says in the entire poem. It's left to the narrator to muse over its meaning, as well as over the stone wall that separates them, noting "Something there is that doesn't love a wall."

For Frost, "mending" is the issue, not the wall. If we choose to erect walls between us then we assign ourselves the perpetual job of mending them, including the relationships between neighbors. Nature tugs, people mend.

In this issue of our Journal, we examine a topic that has been a main focus of The Quivira Coalition since its founding ten years ago: bridging divides and mending relationships. Finding a way across the variety of walls – economic, social, historical, and political – that divide us is the key to a prosperous and healthy future.

Historian Curt Meine leads off by tackling the daunting task of bridging the urban-rural divide – a divide that has grown substantially in recent decades. Curt says one way to do this is to work in the radical center, where people come to "build up the foundations of trust" necessary for progress.

Next, anthropologist Nathan Sayre examines the historical divide between the "old" concept of the Western Range – the collection of laws and attitudes that dominated the arid West for more than a century and which resulted in widespread conflict – and the emerging New Western Range, which offers more hope.

Next up is Linda Decker, who recounts the tribulations and successes her ranch family went through as the Next Generation struggled to cross the inheritance divide.

Then poet and essayist Linda Hasslestrom offers two visions of bridges – both missing and existing.

In "A View From Malta," yours truly takes a look at the divide that separates the 20th century from the 21st.

Lastly, in our research contribution, Colin Talbert and Richard Knight, of Colorado State University, analyze the relationship between public lands grazing and private land ownership, with an emphasis on biological values, reminding us that both halves of the American West, public and private, are inextricably linked.

They conclude with a quote from Wendell Berry that sums up our collective goal: "There is no irresolvable conflict here, but the conflict that exists can be resolved only on the basis of a common understanding of good practice."

Thanks for reading,

Courtney

Front cover photo: the Dry Cimarron River, Rainbow Ranch, Folsom, NM August, 2005. (Photo by Tamara Gadzia.)

Feature

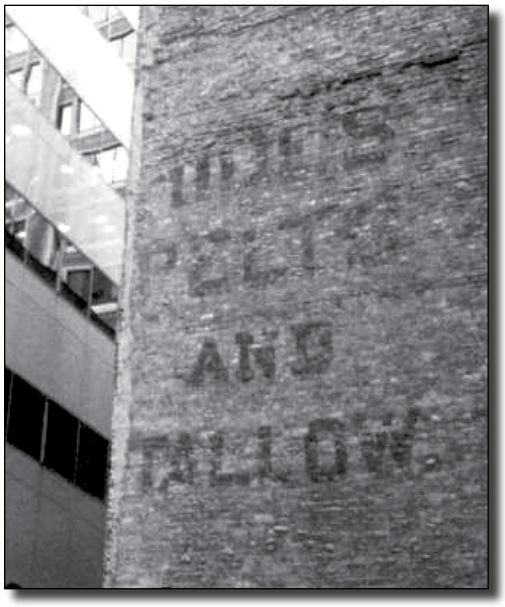
Crossing the Great Divide

by Curt Meine

Ghost Signs

You've seen them, in older city neighborhoods and along Main Street in rural towns: those large ads, painted decades ago on the sides of brick buildings, promoting (in three-foot font) cigars and lumber, bread and shoes, Fine Meats and Dry Goods, Gold Medal flour and General Merchandise. "Ghost signs," they are sometimes called. They are specters from worlds that have disappeared. Their flaking paint and fading colors tell tales, of lapsed businesses and defunct economies, of storefronts abandoned and lives moved on.

My favorite ghost sign was noteworthy for its prime location, at the intersection of Lake and Washington Streets in downtown Chicago. Inconspicuous in the shadows of neighboring skyscrapers, it adorned the east-facing wall of an antiquated building. You could see it best from the adjacent El train platform. Its barely-readable text read: **"HIDES PELTS AND TALLOW."** That terse script told an epic story, of the bonds of exploitation and exchange that once tied North America's inland empire of prairie farms, northern forests, and Western rangelands to the stockyards, factories, mills, and markets of Chicago and beyond.[1] In its economy of words, the sign captured the economy of the mid-continent, and the relationships that transformed city and countryside alike. It displayed both the close connections and the vast distances between them.



(Photo by Nicholas Thompson.)

During a recent visit to Chicago I walked to the corner of Lake and Washington, intent on photographing the sign before it grew any fainter. But Chicago's restless economy had finally caught up to the relic. The old building had lost its tenure in the high-rent Loop district. It had been demolished. New construction was underway. The brick walls had returned to dust, hauled off and deposited anonymously in some landfill out amid the cornfields of Illinois. Disappointed, I stepped into a nearby outlet of Caribou Coffee for a cup of consolation. The credit card display on the coffee shop door jokingly noted: **"Sorry: Beaver Pelts Not Accepted."**

Like ghost signs, the relationship—historic and contemporary—between our urban centers and our rural lands and communities seems to fade inexorably from our consciousness. The globalizing economy rushes ever onward, obliterating the past, burying stories, building over the remains. The consequences for land stewardship are momentous. The less visible the links, the more vulnerable becomes our commitment to conservation as a shared societal goal, crossing boundaries and connecting people and places.

Over the last century—even during the best of

1. William Cronon tells the story in his sweeping account, Nature's Metropolis: Chicago and the Great West (W. W. Norton & Company, 1991).

times—appreciation of conservation as an expression of individual and community responsibility across the landscape has been provisional at best. These days it ranks low on the list of civic concerns. Few elected leaders seem able or willing to examine the connections between urban and rural, and between conservation and the major issues of the day: national security, fiscal responsibility, economic well-being, affordable health care, energy demand and production, immigration, education. More than a few are willing to score political points by exploiting the rural-urban divide, and leaving the bitter residue of distrust for others to clean up.

The task of defining, understanding, and overcoming the urban-rural divide is obviously important to those of us who care about land, human communities, and the connections between them. The significance of this task, however, is not limited to conservation per se. It is a test of our capacity to reclaim and reinvigorate the very idea of the common good in America.[2] It is an indicator of our commitment to the lately much-maligned public interest—the "general welfare" of the U.S. Constitution's preamble. The divisions in our landscapes and the deep ideological rift in our body politic are reflections of each other. It follows that conservationists must be leaders in crossing this great divide and reasserting the promise of the common good.

From Divide to Spectrum

A first step toward overcoming the urban-rural divide is in fact to note that the idea itself is superficial. The fundamental connections remain, they are inescapable, and they work both ways. Urban people, even those most removed from the realities of country life, are to some degree rural by virtue of their eating, drinking, breathing, providing services, producing and processing goods, and otherwise existing in a world whose ecosystems (however altered) they depend upon. Rural people, even those furthest off the grid, are to some degree urban by virtue of the social, economic, technological, and communication systems (however stretched) they belong to. We all co-inhabit a world that is part rural and part urban. We are not separated by an insurmountable divide. We are inherently and deeply connected. It is the changing nature—and the nature-changing impact—of those connections that we find problematic.

When we look across the plain reality of our landscapes, we see in fact that we do not live on two discrete sides of a neatly partitioned and polarized rural-urban divide. That sharp dichotomy allows us to think simplistically about our conservation problems and our broader political problems. It does nothing to help solve them. To do that, we need to discard the simple dualism, and recognize the complex reality of a land-use continuum or spectrum.

"...we do not live on two discrete sides of a neatly partitioned and polarized rural-urban divide. That sharp dichotomy allows us to think simplistically about our conservation problems and our broader political problems. It does nothing to help solve them."

At one end of the spectrum, beyond the rural, we encounter the wild: those parts of the landscape that have been relatively less affected by human activity, over relatively large areas, for relatively long periods of time. The human influence is present in wild lands—no place is without some degree of human impact—but it is less intense, extensive, conspicuous, and persistent. The idea of wilderness has taken many hits in the last two decades. Its traditional opponents continue to question the notion that wilderness protection has any legitimate role within conservation's broader mission, and avoid serious consideration of the benefits of conservative land-use and economic self-restraint. Critics have reexamined the theoretical Achilles' heel of the wilderness idea: that it ignores the reality of the historic human presence in, and impact on, "wild" places and biotic communities.[3] Meanwhile, defend-

2. Peter Brown covers this territory in his book Restoring the Public Trust: A Fresh Vision for Progressive Government in America (Beacon Press, 1994). Eric Freyfogle comes at the same questions from a conservation angle in his books The Land We Share: Private Property and the Common Good (Island Press, 2003) and Bounded People, Boundless Lands: Envisioning a New Land Ethic (Island Press, 1998).

3. See J. Baird Callicott and Michael P. Nelson, eds., The Great New Wilderness Debate (University of Georgia Press, 1998); Thomas Vale,

ers of the wild have been reclaiming the idea and defining a revised role for it within conservation.[4]

Next we come to the rural: the farms, grasslands, rangelands, and forestlands where people have, to varying degrees, reshaped the land and its community of life to meet assorted economic goals. The customary term for this portion of the landscape these days is "working lands" (not forgetting, let's hope, the ecological "work" that wild lands perform). Rural lands are of course far from uniform. Our ways of deriving food, fiber, fuel, and fun from them are arrayed along their own spectra of scale, intensity, and thoughtfulness. This piece of the land spectrum also includes the smaller cities and towns whose fates have traditionally been tied to the farms and ranches they serve—and whose character changes as the economics and demographics of rural life change.

We come then to the suburban: one concentric ring of development after another, annexing the space—physical and psychic—between the urban and the rural. As many observers have noted, the growth of suburbia (and now exurbia) since World War II has altered the very character of America's lifestyle, politics, and culture.[5] For present purposes, a few basic points bear mentioning. Suburban and exurban development is neither urban nor rural. It has consumed both, depleting inner cities while chewing its way outward into rural lands. It has done so during an unprecedented period of development-friendly policies and cheap, abundant oil. It has changed how and where Americans live. We may think of ourselves as a nation of landless city-dwellers and landed country-dwellers, but by 1970, more Americans lived in suburbs than in cities. By 1994, a majority of all Americans lived in suburbs. And the suburbs served as important spawning grounds for the baby-boom environmental movement that supplanted the older rural-based conservation tradition.

We come then to the cities. Older cities and newer cities, bustling cities and decaying cities. Some more compact around their older cores; others spread out every which way. Some utterly dependent on automobiles and the oil that runs them; others with more diverse transportation networks. Some now making efforts to fit better within their landscapes, others hardly cognizant (it seems) that any larger landscape exists. In her classic study The Death and Life of Great American Cities, the late Jane Jacobs wrote, "The point of cities is multiplicity of choice." [6] Over the last century, however, the range of choices offered in urban areas has been subject to the same revolutionary changes in technology, communications, transportation, and finance that have reshaped other parts of the landscape.

Within this land spectrum, the dynamics have been too wrong for too long. Our remaining wild lands have become increasingly isolated and threatened islands within fragmented landscapes, hemmed in by development, vulnerable to invasion by exotic species, degraded through the disruption of ecosystem processes. In the face of ever-narrower economic margins, "working" farms, ranches, and forestlands must be worked ever more intensively, at larger scales—or turned over to the final crop of subdivision, sprawl, and exurban development. Rural places with dramatic scenery, an attractive waterfront, access to transportation, and perhaps a nearby college, become magnets for intensive tourism and higher-end development. At the other end of the socio-economic scale, far from the hotspots of upscale development, rural poverty grips regions where the extractive economies have played out.[7] The concentrated capital has been channeled onward, upward, and outward.

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ed., Fire, Native Peoples, and the Natural Landscape (Island Press, 2003). Charles Mann presents the view of the western hemisphere as fully "humanized" in 1491: New Revelations of the Americas Before Columbus (Knopf, 2005).

4. At the interface with agriculture and ranching, for example, see Daniel Imhoff and Roberta Carro's Farming with the Wild: Enhancing Biodiversity on Farms and Ranches (Sierra Club Books, 2003); and Nathan Sayre's Working Wilderness: the Malpai Borderlands Group and the Future of the Western Range (Rio Nuevo Press, 2005).

5. See James Howard Kunstler's books The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape (Simon and Schuster, 1993) and The Long Emergency: Surviving the End of the Oil Age, Climate Change, and Other Converging Catastrophes of the Twenty-first Century (Grove Press, 2006); Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck, Suburban Nation: The Rise of Sprawl and the Decline of the American Dream (North Point Press, 2000); and Eric Schlosser, Fast Food Nation: The Dark Side of the All-American Meal (Houghton Mifflin, 2001).

6. Jane Jacobs, The Death and Life of Great American Cities (Random House, 1961), p. 340.

7. For example, see Erik Eckholm, "Rural Oregon Town Feels the Pinch of Poverty", *New York Times*, 20 August 2006.

Meanwhile, two generations of Americans have grown up with the conversion of open space to suburb as the standard trajectory of land-use change. Now, as the first rings of suburbs grow older and poorer, those who can't get no satisfaction in their current place move on to the gated communities and fortress homes of the exurban edge and beyond.[8] Urban flight and deindustrialization has hollowed out many older cities. Among the nation's major cities, only Las Vegas, Nevada, has gained in population in recent years. Even as the increasingly globalized economy has worn down the American middle-class in general, urban middle-class neighborhoods have eroded at an even faster pace.[9] The "working lands" of the cities, unless blessed by special cultural and environmental amenities, fall easily into neglect and disrepair. The unglamorous work of reclaiming contaminated brownfields, rehabilitating industrial zones, and restoring deadened waterways too often simply goes undone.

Aldo Leopold on farm, Lake Mills, Wisconsin.
(Photo courtesy of the Aldo Leopold Foundation.)

There are obvious exceptions to these trends, but the main feedback loops are all wrong. Economic subsidies, jurisdictional jealousies, and wedge-driving politics pit one part of the landscape against another. Degradation in one portion of the land spectrum exacerbates degradation in other portions. Governmental policies at all levels feed the trends. Those who seek a healthier relationship between people and land face a sobering challenge. We can not achieve sustainable farms, or ranches, or small towns, or suburbs, or cities, within an unsustainable landscape. To be an effective conservationist—whether as a protector of wild land, a caring steward of working land, a restorer of damaged ecosystems, an innovative designer of urban environments, or a builder of healthier city neighborhoods—requires attention to the landscape as a whole, and to the broad social, economic, and environmental forces that drive change within it.

None of us as individuals can conserve entire landscapes. But all of us can and must take time to look up from our own place and recognize the ties that still bind. Only then can we build what we desperately need: a coherent conservation vision that reaches from the innermost city to the outermost wilds, and that recognizes the dynamic connections across the land. We must somehow turn the internal dynamics around and rejigger the social, economic, and political feedback loops. Reinvigorated urban cores and neighborhoods; reclaimed industrial districts; suburbs retrofitted and prepared for a post-peak-oil future; vibrant smaller towns and cities; sustainably managed farms, ranches, forests, and fisheries; coastal waters, surface waters, watersheds, wetlands, and aquifers that are carefully conserved, monitored, and restored; lands whose wildness is recognized, honored, and vigorously guarded: these are the parts of the whole that conservationists of all backgrounds and interests must be leaders in drawing together.[10] All of us feel more comfortable in, and more committed to, different parts of the whole landscape. But we will all lose what we care for unless we step outside our own comfort zone

Growing from the Radical Center

The work of The Quivira Coalition takes place at the heart of the matter, at the point where conservation and agriculture intersect. This is the critical link within the land spectrum, the keystone in the arch. If this connection fails, we can expect more of the

8. Rick Lyman, "In Exurbs, Life Framed By Hours Spent in the Car," *New York Times*, 18 December 2005; D'Vera Cohn, "Inner Suburbs Fall Through the Cracks: Study Says Cities, Exurbs Get the Help," *Washington Post*, 15 February 2006; Bruce Lambert, "'First' Suburbs Growing Older and Poorer, Report Warns," *New York Times*, 16 February 2006; Ford Fessenden, "Americans Head Out Beyond the Exurbs," *New York Times*, 7 May 2006.

9. Blaine Harden, "U.S. Losing Its Middle-Class Neighborhoods," *Washington Post*, 22 June 2006.

10. Curt Meine, "Leave No Acre Behind: Renewing the Conservation Consensus," *Wingspread Journal* (The Johnson Foundation, 2004), pp. 3-7.

same: further loss and degradation of land, rigidly polarized politics, predictable environmental conflict, squandered opportunities for restoration, corrosion of community values, neglect of the public interest. If, however, common ground is secured here, a new conservation consensus may emerge.

In his book Citizenship Papers Wendell Berry observes, "The most tragic conflict in the history of conservation is that between the conservationists and the farmers and ranchers. It is tragic because it is unnecessary."[11] Berry's comment is a painful reminder that we are far from achieving—or even defining—a shared vision of land health and community well-being. Rather, we remain a society at odds with itself over the value, meaning, and use of land, and over the proper relationship between the rights and responsibilities of individuals and communities.

Historical marker at Coon Valley, Wisconsin with Hugh Hammond Bennett, first chief of the Soil Conservation Service (second from the left). (Photo courtesy of USDA/NRCS.)

For Aldo Leopold, of course, the "community" included not only people, but "soils, waters, plants, and animals, or collectively: the land."[12] He saw the human community embedded within the land community, and understood that their histories and destinies were bound together in complex ways. The exercise of individual rights, and the recognition of responsibilities, are reflected in the health of the soils, the flow of the waters, and the diversity and dynamics of plant and animal populations. The state of the land, in turn, influences the durability and health of the human communities that depend upon it.

In Leopold's day, these relationships played out dramatically in the agricultural arena. By the 1930s the rural lands of the upper Midwest, and much of the nation, reflected the hard use they had endured since European settlement: broad swaths of deforestation and overgrazing, widespread soil erosion, polluted and sediment-choked waterways, unchecked drainage of wetlands, depleted wildlife populations, faltering rural communities. Leopold and his contemporaries in the conservation movement labored to find new ways to treat not just the symptoms of dysfunction, but the root causes. In particular, this entailed new approaches to conservation on the nation's private lands.

In a visionary 1939 essay, "The Farmer as a Conservationist," Leopold defined the challenge that farmers and conservationists together faced: "It is the individual farmer who must weave the greater part of the rug on which America stands. Shall he weave into it only the sober yarns which warm the feet, or also some of the colors which warm the heart and eye? Granted that there may be a question which returns him the most profit as an individual, can there be any question which is best for his community? This raises the question: is the individual farmer capable of dedicating private land to uses which profit the community, even though they may not so clearly profit him? We may be over-hasty in assuming that he is not."[13] During those years of economic and ecological crisis, a paramount goal of conservationists was to develop new techniques, programs, and policies through which landowners could protect "the public interest in private land."[14] And everyone had a stake in that goal.

Conservationists in the 1930s experimented with a diverse array of arrangements that allowed individual landowners to coordinate their conservation

11. Wendell Berry, Citizenship Papers (Shoemaker & Hoard, 2003), p. 125.

12. Aldo Leopold, A Sand County Almanac and Sketches Here and There (Oxford University Press, 1949), p. 204.

13. Aldo Leopold, Susan L. Flader and J. Baird Callicott, eds., The River of the Mother of God and Other Essays (University of Wisconsin Press, 1991), p. 261.

14. Aldo Leopold, The River of the Mother of God, p. 215.

actions for mutual benefit. Leopold's own activities in Wisconsin provide some sense of the ferment. At Coon Valley, in the steep-ridged coulee country along the upper Mississippi, hundreds of farmers signed up as voluntary participants in the nation's first watershed-scale soil conservation demonstration area.[15] Leopold advised on the project. At Riley, a railroad crossing west of Madison, Leopold and his hunting friends from town worked in partnership with a dozen farmers to enhance game and wildlife habitat conditions.[16] Along the Wisconsin River north of Madison, Leopold and his students conducted long-term studies in wildlife population ecology through close cooperation with the area's farm families.[17] At Faville Grove, half-way between Milwaukee and Madison, other students carried out pioneering research on wildlife management and prairie ecology on some of Wisconsin's most progressive dairy farms.[18]

Such projects were representative of efforts nationwide that brought farmers, ranchers, and conservationists together to address both immediate ecological problems and long-term land stewardship needs. This surge of innovation was a response to crisis, opportunity, and new ecological understanding, as the dire conditions of the 1930s evoked commitment and creativity from all parties (today, we would call them "partners" or "stakeholders"). It was during this time of change that the USDA's Soil Conservation Service, now the Natural Resources Conservation Service (NRCS), was created, with the sole aim of working with the nation's private landowners. In a 1936 address reviewing these experiments in private land conservation, Leopold wrote: "I still get a letter a week asking for a copy of 'the best' way to organize farmers. I no longer worry much about mechanisms—they will come when the farmer is as proud of his prairie chickens as he is of his silo. It may well be said that the search today is for 'the best' way to change the land philosophy of America."[19]

Fast forward, from the 1930s to Wendell Berry and the "tragic conflict...between the conservationists and the farmers and ranchers." The history of that conflict has yet to be written.[20] When it is, it will record the wilting of the tender shoots of cooperative conservation effort that Leopold and his generation nurtured. It will explore how two generations of population growth, easy mobility, intensified resource management, academic specialization, land development and fragmentation, increasing wealth and consumption, and hard environmental politics undermined the emerging prewar consensus. It will examine the changing economics of land use and agriculture after World War II; the advent of new agricultural technologies (including synthetic pesticides); shifting demographics and the growing tensions between rural and urban America; the aforementioned flight from the cities and spread of suburbia; the growing chasm between producers and consumers of agricultural products; and the fraying fabric of community life in America, in urban, suburban, exurban, and rural settings alike.

But this to-be-written history would conclude, hopefully with an account of the key role that agriculture has played in the recent renaissance of community-based conservation. Since the early 1990s these initiatives have flowered in profusion. They go by many names: ecosystem management, watershed councils, land trusts, cooperative conservation.... They have varied aims: protecting significant natural features, restoring native plant and animal communities and ecological processes, co-managing large landscapes, securing

15. See Leopold's essay, "Coon Valley: An Adventure in Cooperative Conservation", in The River of the Mother of God, pp. 219-223.

16. See Leopold's essay, "Helping Ourselves," in The River of the Mother of God, pp. 203-208; and Bob Silbernagel and Janet Silbernagel, "Tracking Aldo Leopold through Riley's Farmland," *Wisconsin Magazine of History* 86, 4 (2003), pp. 34-45.

17. Julianne Newton describes the Prairie du Sac study in detail in her newly published book, Aldo Leopold's Odyssey (Island Press, 2006).

18. Art Hawkins, Aldo Leopold's student, recorded the history of the site in his paper, "A Wildlife History at Faville Grove, Wisconsin," *Transactions of the Wisconsin Academy of Sciences, Arts and Letters* (1940), pp 29-65. Hawkins, a leading waterfowl biologist and conservationist, passed away in March 2006 at the age of 92. I dedicate this essay to his memory.

19. The statement is from Leopold's 1936 paper "Farmer-sportsmen Set-ups in the North Central Region," published in the *Proceedings of the North American Wildlife Conference.*

20. But we do have important foundations for such a study. See, for example, Berry's own classic, The Unsettling of America: Culture and Agriculture (first published in 1977); Donald Worster, The Wealth of Nature: Environmental History and the Ecological Imagination (Oxford University Press, 1993); Wes Jackson, Becoming Native to This Place (Counterpoint, 1996); and Randal S. Beeman and James A. Pritchard, A Green and Permanent Land: Ecology and Agriculture in the Twentieth Century (University Press of Kansas, 2001).

open space, preserving farmland and rangelands, improving urban neighborhoods, rehabilitating waterways. What they have in common is a commitment to involving people directly, in new ways, at the local level, in the stewardship of their home places.[21]

Increasingly these diverse "mechanisms" recognize and build upon the conservation value—actual and potential—of the agricultural part of the landscape. Private land conservation has re-emerged after being in eclipse during the rise of environmentalism. This has happened as other factors have begun to reshape agriculture as we have known it, including the dramatic increase in demand for locally and organically produced food; the meeting of that demand through local farmer's markets, community-supported agriculture, and other alternative means of connecting producers and consumers; growing concern over childhood obesity, diabetes, and other nutrition-related public health issues; increasing appreciation of farms not simply as a food factories, but as dynamic agroecosystems; profound uncertainties connected to the future availability, use, and sources of energy and the world's changing climate; and the far-reaching impacts of international trade agreements and policies. Once again, agriculture is the arena in which large social, political, economic, and environmental forces will play out, where the relationship between public and private interests will be negotiated, and where the fate of the land will be forged.

Wendell Berry followed his observation with a cautiously realistic prognosis: that the conflict between farming and conservation was not in fact insurmountable, but that it "can be resolved only on the basis of a common understanding of good practices."[22] On landscapes across the United States and beyond, farmers, ranchers, and conservationists seek to work out those "good practices" and the policies to support them. In doing so, we try again to achieve conservation as Leopold once defined it, as a state of harmony between people and land. In his wisdom, Leopold wrote: "Let's admit at the outset that harmony between man and land, like harmony between neighbors, is an ideal—and one we shall never obtain.... But any man who respects himself and his land can try." In bringing agriculture and conservation together—again—we demonstrate our respect, and we try.[23]

(Photos courtesy of *Photohome.com*, University Corp. for Atmospheric Research, USDA/NRCS, Curt Meine, and Alaska Coalition.)

All Over the Map

As much as any organization, The Quivira Coalition has fostered useful communication across the great divide, and all over the map. These conversations are desperately needed. Over the last generation, American culture and politics has brought us to

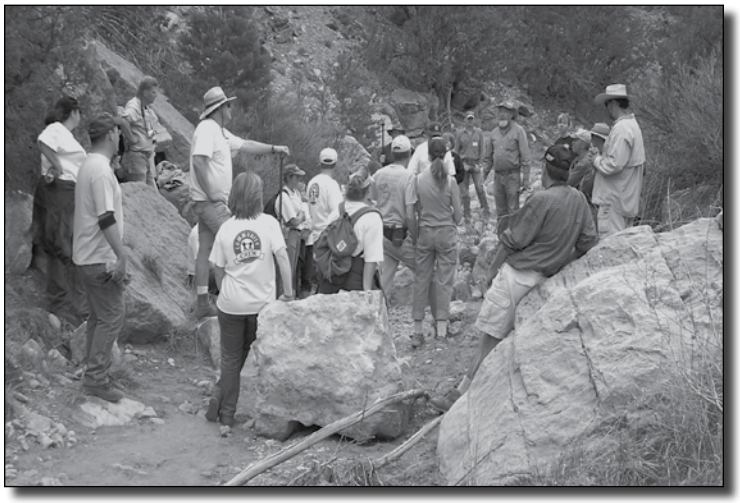
21. The literature on decentralized and community-based approaches in conservation has grown voluminous. A small sampling would include: Daniel Kemmis, Community and the Politics of Place (University of Oklahoma Press, 1990); William Vitek and Wes Jackson, eds., Rooted in the Land: Essays on Community and Place (Yale University Press, 1996); Ted Bernard and Jora M. Young, The Ecology of Hope: Communities Collaborate for Sustainability (New Society Publishers, 1997); Robert Keiter, Reclaiming the Native Home of Hope: Community, Ecology, and the American West (University of Utah Press, 1998); Philip Brick, Doug Snow, and Sarah Van de Wetering, eds., Across the Great Divide: Explorations in Collaborative Conservation and the American West (Island Press, 2000); and Peter Forbes, The Great Remembering: Further Thoughts on Land, Soul, and Society (The Trust for Public Land, 2001).

22. Berry, Citizenship Papers, p. 125

23. The statement appears in Leopold's original version of "The Farmer as A Conservationist," which was given as an address. A revised version of the statement was included in the essay "Conservation" in Round River (Oxford University Press, 1953), and in the essay "Natural History" in the 1970 Ballantine paperback edition of A Sand County Almanac.

a state of what some have called a "cold civil war." We find ourselves divided between rural red and urban blue (buffered by shades-of-purple suburbs). With little questioning of the premise, we willingly place ourselves (and demonize others) somewhere along a one-dimensional right-wing vs. left-wing axis. That other axes and dimensions might exist; that common ground might be reclaimed; that a radical center might serve to emphasize connections over divisions: these possibilities demand respectful conversation among those who care.

Our ways of valuing, using, managing, protecting, and thinking about land have contributed to the discord. Our ways of caring for and restoring it must contribute to reconciliation. To do so, however, a renewed conservation consensus must gain ground. And that will require building new constituencies, creating different alliances, and providing greater technical capacity. Above all, it will require taking seriously the precept that land is "a community to which we belong".[24] A land divided against itself cannot be conserved.



Public Service Company of New Mexico (PNM) volunteers learn from Bill Zeedyk about low tech riparian restoration practices during a volunteer workday on Cedro Creek near Albuquerque, New Mexico, April 2006. (Photo by Tamara Gadzia.)

How can we encourage growth of a new consensus? By doing more of what The Quivira Coalition and like-missioned organizations are already doing; highlighting that which connects us across the landscape. This begins with the basics: food, soil, water, air, ecological relationships, migratory pathways. It includes shared goals and values: human health, economic vitality, responsibility to future generations. It embraces the intangible things that are harder to articulate: beauty, memory, identity, spirit, hope, citizenship, community, meaning, trust, mystery, wonder. We can dwell upon that which divides us, but we dwell within landscapes that connect us.

Revisiting our history. It's a long story.... Human beings began to disperse outward from our ancestral Africa more than 60,000 years ago. Agriculture has shaped human civilization for ten millennia. The first cities arose a few thousand years after that. The industrial revolution gathered steam two centuries ago. Conservation became a self-conscious movement in the U.S. a century ago. Ecology matured as a science in the middle of the 20th century. Environmentalism emerged only a generation ago. Conservation biology and restoration ecology are just infant fields. How we reconcile the needs of people and land depends on how we understand and resolve these layers of history. Only in conversations across the great divide can we build such understanding.

Removing the wedges. It's a political reality: in recent years, elections have been won and careers advanced through ferocious campaigns of divide-and-conquer. Appeals based on emotional wedge issues and narrow identity politics have left a gaping hole in our political center. Political differences are inherent—even necessary—in any functioning democracy, but only shared values and a robust notion of the common good can hold democracy together so that it can function. To build consensus, we need to reject the wedges and the fear that provides them with their points of entry.

Education, education, education. Arguments about land are emotional precisely because people care deeply about it. And the more they know about it, the more they care (even when their ways of knowing and caring differ greatly). Meanwhile, however, we live at a time when the general public's level of land literacy is low and, we fear, yet to bottom out. A new generation has grown up with an abundance of diversions, but fewer opportunities to interact meaningfully with land.[25] Informed education about land is scarce. It is

24. Leopold, A Sand County Almanac, p. viii.

25. Richard Louv, Last Child in the Woods: Saving Our Children from

our job to teach about land anytime and anywhere we have the opportunity, through workshops, field days, forums, conferences, conversations, classes, involvement in local issues. The radical center can expand outward only as far as the circle of education grows.

Providing leadership. There would be less need for The Quivira Coalition, or this journal, or the radical center, if we had more effective and visionary leadership in the public arena, uniting us across the great divide. But the absence of leadership has left a vacuum that only dedicated citizens, reaching out to one another, can fill. Leadership in building the radical center will not come from above. It is more likely to be sitting in the chair next to you at your next meeting. We are at a time in our history when leadership has little to do with title or position or budget; it has everything to do with vision, passion, knowledge, imagination, skill, independence, and generosity of spirit.

These are basic themes, common sense even. But in identifying them we see why the radical center is in fact so radical. For the record, recall the alternative definitions of the word. There is the core botanical meaning: *of, relating to, or proceeding from the roots.* There is "radical" as a synonym for "fundamental": relating to or affecting the basic nature or most important features of something. It is a synonym for "pervasive": far-reaching, searching, or thoroughgoing. It is a medical term: a treatment intended to remove the source of a disease, rather than simply treat the symptoms. And there is also the valley-speak usage: excellent, admirable, or awe-inspiring. To work in the radical center is to do more than merely triangulate between two points to find a point of comfortable moderation or compromise. It is to reject short-term political opportunism, band-aid fixes, and the language of division. It is to build up the foundations of trust and pragmatic progress by bringing diverse people together, examining the roots of problems, and moving forward from there.

To be in the radical center is to take land seriously as both source and reflection of our lives upon it. In "The Farmer as a Conservationist," Leopold wrote that "The landscape of any farm is the owner's portrait of himself." We can expand the gist of Leopold's comment: the landscape of America is our group self-portrait. When we look upon our cities, suburbs, rural lands, and wild lands, we see ourselves. The land reveals us for who we are: our values and priorities, our faiths and philosophies, our policies and technologies, our economic and educational systems, our ways of governing ourselves. Those working in the radical center strive to make a fairer portrait of ourselves. We do so by challenging orthodoxy, inventing tools, and building relationships. In the end, the land itself will show the results.

Paul Johnson, former chief of the NRCS and a contributor to The Quivira Coalition's "Invitation to the Radical Center"*, once noted: "A nation that ends up with urban islands on one side, and islands of wild land on another side, and a vast sea of food and fiber factories in between, is not a geography of hope."[26] In offering that troubling vision, Johnson challenged us to aim for a higher conservation goal, to seek more than geographic isolation, ruthless efficiency, and crumbs of wildness from the land-use table. He was pointing toward a conservation future that would find citizens, landowners, and land-users working in concert, across the map, to build health, diversity, beauty, productivity, and community well-being into and across our landscapes. It is an expansive vision, worthy of the deep longing that brings those who care for land and people together in the radical center.

Nature-Deficit Disorder (Algonquin Books, 2005); Oliver R.W. Pergams and Patricia A. Zaradic, "Is love of nature in the U.S. becoming love of electronic media? 16-year downtrend in national park visits explained by watching movies, playing video games, internet use, and oil prices," *Journal of Environmental Management* 80,4 (September 2006), pp. 387-393.

26. From a presentation by Paul Johnson at the symposium "Preventing Extinction: Advances in Biodiversity Conservation," American Museum of Natural History, New York City, 18 April 1997.

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**Invitation to join The Radical Center can be found at www.quiviracoalition.org. Click on Radical Center Invitation.*

Photo of Curt Meine by Sharon Dana.

Colloquium

The New Western Range*

by Nathan Sayre

The interior West is booming. The population of the eight intermountain states—Arizona, New Mexico, Utah, Nevada, Colorado, Wyoming, Idaho and Montana—grew three times faster than the rest of the country in the 1990s. Nevada and Arizona are the nation's fastest growing states, and the fastest growing counties surround Phoenix and Las Vegas. The West has known booms before—most of them followed by busts.

But this boom is apparently different. No longer is the region's economic activity tied closely to natural resource extraction and agriculture, as in the past. Mining, farming, ranching and timber production are now rather modest parts of the West's economy, and especially of its growth. Nowadays there is a more diversified economy featuring tourism, technology, industry and professional services. This boom will continue, because this booming West is new—the New West.

"The New West: cows versus condos?" (Photo by Courtney White.)

Although concentrated in the cities, the New West boom has rippled outward and now affects even remote rural areas. The amount of developed land is growing two or three times faster than the population. Approximately 40 million acres of farm and ranch land have gone out of agricultural production in the past 40 years. Nationally, more people are moving to rural areas than from them for the first time since the Depression. Rural residential development—where parcels average 10-40 acres in size—is the nation's fastest growing type of land use since 1950, and now covers almost 25 percent of the continental US.

At stake in this debate is America's most legendary and contested landscape: the West's vast open rangelands, "beyond the 100th meridian," where average annual precipitation is less than twenty inches and dry farming is unreliable or impossible. The West's legends and conflicts are rooted in ranching, the dominant land use on some 485 million acres of federal, state and private lands.

For one hundred years, these lands have been used, managed and governed under a system of institutions, practices and ideas known as the Western Range. The system depended on several assumptions about how the range worked, what made it valuable, and how it related to the larger economy and society. In the New West, these assumptions no longer hold, and the Western Range is falling apart as a result.

Should its disintegration be mourned, or celebrated? Can it be retooled to meet new circumstances? What might a New Western Range look like?

The Origins of the Western Range

The blueprint for the Western Range was produced in 1905 by President Roosevelt's Public Lands

* Excerpted from Working Wilderness: The Malpai Borderlands Group and the Future of the Western Range (Sayre, Rio Nuevo Press 2005).

Commission. Throughout the West at that time, and especially in the Southwest, rangelands were in desperate shape. Livestock had flooded into the region during the Cattle Boom of the 1870s and 1880s, taking advantage of free and open land blanketed with grass.

Under the nation's homesteading laws, settlers were able to secure only small areas—less than a square mile—for private ownership. They had chosen sites endowed with water and fertile land, while everything in between had remained open to anyone who wished to use it. The result was disastrous overgrazing. Livestock perished in huge numbers during blizzards on the Great Plains in the 1880s, and again during southwestern droughts in the 1890s.

Plans for big dams and irrigation works, envisioned under the Newlands Act of 1902, appeared threatened by extreme, widespread erosion. Earlier attempts to reform the laws affecting rangelands had foundered on political shoals, but after the turn of the century no one any longer disputed the need for change.

The Commission's report, based on two years of public hearings and research, opened with a simple statement regarding the West's rangelands: "They are, and probably always will be, of chief value for grazing." Half fact and half prediction, this judgment underpinned everything else the Commission recommended, in particular the system of grazing allotments and permits that was instituted on national forests from that year forward. At the time, livestock production was the only livelihood available across most of the arid and semiarid West, and private lands were typically too small to support a household.

The Western Range was intended to give producers control of enough land to make a living, thereby bringing about "the largest permanent occupation of the country by actual settlers and home seekers." Twenty-nine years later, under the Taylor Grazing Act, the same basic system was extended to the rest of the West's unclaimed federal rangelands—today's Bureau of Land Management lands.

The Western Range system also assigned carrying capacities—known as stocking rates, permitted numbers, or preferences—to each public land grazing allotment, figures that were destined to become the focus of conflicts between ranchers, agencies and environmentalists for decades to follow. In these and other ways, the Western Range set the terms for today's debates, not only on the landscape but also in law, science and the public mind.

Diamond A Outfit cowboys from Cohise County, Arizona, 1880's.
(Photo courtesy of Rio Nuevo Press.)

The contradiction between the New West and the Western Range is most conspicuous in the predictive half of the Commission's opening judgment: the fatefully erroneous phrase "and probably always will be." If one measures value by market prices—as the Commission did—then today, the "chief value" of Western rangelands is no longer grazing.

In all but the most isolated settings, the highest-value use of the federal lands is recreation, while that of the private lands is real estate development. The two land types are still economically linked—inasmuch as proximity to public land raises the value of private home sites—but in general, livelihoods are no longer dependent on the land's ecology. In the New West, people want to live on the range, and they will pay handsomely for natural amenities, but they don't need to make their living from it.

Had the Commission done its work a century later, the Western Range would have looked completely different.

The central premise of the Western Range, then, was that without foreseeable alternative land uses, the value of ranches would always be a function of their productivity for livestock. Provided with secure tenure to enough grazing land to make a living, the ranchers' self-interest would therefore align with the public's interest in healthy rangelands.

"BAD COW"? (Photo courtesy of Courtney White.)

The New West's real estate market has pulled the rug out from under this argument, but before about 1970 it was an eminently sound proposition. Yet the Western Range, by most accounts, was at best only a moderate success. Generally speaking, range conditions are better now than in 1905, but not as good as they were in 1870. Particularly in drier regions such as the Southwest, large areas of range have shifted from grass dominance to shrubbier conditions, despite declining numbers of livestock.

So what went wrong?

The Origins of Mutual Distrust

For more than fifty years, critics of ranching and the Western Range have aimed their attacks at the motives and incentives of ranchers, accusing them of putting self-interest ahead of the public good. Unsatisfactory ecological conditions have served as evidence for this, but the accusation originated on purely political terrain. By installing federal land management agencies as permanent features of the region's landscape and economy, the Western Range ensured that politics would be different there, and more difficult, than elsewhere in the US.

Efforts were made to provide local communities, and especially permittees, a strong voice in the administration of Forest Service and BLM grazing lands. But tensions always persisted, and livestock associations and Western political leaders repeatedly called for devolution of federal lands downward—to the states, the counties, or to private ownership. It was these demands that confirmed the critics' conviction that ranchers could not be trusted.

But what if the problems of the Western Range were a function of flawed policies and inadequate knowledge, rather than the motives and incentives of ranchers? What if everyone involved—ranchers, agencies, even environmentalists—was working with a poor model of how rangelands worked and how to take care of them for the long term? What if better knowledge and practices have only emerged recently, at just the time when rising real estate values have rendered ranching "irrational"?

Based on historical records and the latest research in rangeland ecology, one can make a strong argument that this indeed was the case, especially in the Southwest.

It seems intuitive: if the Old West damaged the land, then the land will recover when the Old West goes away. A century of battles over stocking rates has reinforced the idea that fewer animals necessarily equals healthier land. But this intuition—deeply ingrained in our culture and, until recently, shared by the science of ecology—is in fact mistaken.

Drier rangelands in particular, such as those of the Great Basin and the Southwest, will not heal themselves upon removal of livestock. Strange as it may sound, the very land use that has attended so much damage to the Western Range—livestock ranching—now may be the key to its future conservation.

Restoring rangelands to some "pristine" past condition is an impossible fantasy, a product (or a cause?) of outdated ecological theories. But remediation—mitigating past damage and working towards conditions that are better for wildlife and watersheds as well as livestock—is a realistic goal. Ranchers have a direct stake in realizing this goal, especially if they do not

"GOOD COW"? (Photo by Courtney White.)

want to see their lands turned into homesites.

The Western Range is broken, but the polarized politics of "the rangeland conflict," by pitting ranchers against environmentalists in a kind of holy war, have made wholesale reform unattainable. Instead, innovations have had to emerge from the grassroots, poking up through layers of indifference, habit and bureaucracy. The stories of these seedling efforts have scarcely been told, let alone collected and evaluated.

Their picture is unique: no place else will look exactly like it. But their progress alone is noteworthy, and their story may help inspire and guide the many other people who share their conviction that the blessings of the West depend on the picture as a whole, no matter how tempting it is to dwell on the pieces.

Passing from Old West to New cannot but be a messy process in some degree. But the new boosters and the swelling ranks of New Westerners err in dismissing the Western Range as an irrelevant anachronism or a disgraceful inheritance. Nature will not redeem past sins for free, and sacrificing the Old West on the altar of the New is false propitiation.

A New Western Range

The outlines of a New Western Range are coming into focus. It begins with an emphasis on private lands. Even if they are a minority of the overall landscape, they are likely to be of greater ecological consequence than the surrounding state and federal holdings. They are also the lands most vulnerable to subdivision and development. Although ranches may be dependent on public grazing leases for their economic viability, the public lands are ecologically dependent on the continued wellbeing of the adjacent private ranch lands.

The Achilles' heel of the Western Range was its assumption that the highest economic use of private lands would always be livestock grazing. This is no longer the case, but it can be remedied. There is strong evidence that most ranchers do not want to see their lands subdivided and developed. Keeping large landscapes open and unfragmented is in the public interest, for ecological and fiscal reasons as well as aesthetic ones.

One important tool is conservation easements, which allow ranch owners to realize the equity value of their lands' development potential without sacrificing this public good. But easements on private land must be linked to grazing leases on public lands. The logical next step is to acknowledge this interdependency and reciprocate: If a private ranch has renounced the option of development, the associated grazing leases should be extended accordingly. Requirements for responsible management of leased lands would remain in place.

This would restore the broken premise of the Western Range that a ranch's value rests on its productive capacity, such that ranchers' private incentives align with the public's interest in healthy rangelands.

A second flaw in the Western Range was its Clementsian assumptions about plant ecology: that livestock grazing is the key variable in vegetation dynamics, and that livestock removal will reverse changes caused by past grazing. There are instances where these assumptions hold, but there are many others where they do not. In drier settings such as the Southwest, livestock exclusion is neither necessary nor sufficient to achieve most conservation goals. To focus on livestock alone, to the exclusion of climate, fire, erosion, invasive species, urbanization and other factors is both politically crippling and ecologically naïve.

Third, the Western Range also failed to recognize the variability of rangeland ecosystems across space and time. There is far too much diversity in the rangelands of the West for a single administrative paradigm to accommodate. Likewise, any given range is far too variable for a static management prescription such as is currently imposed under the concept of carrying capacity.

What is needed is greater flexibility on the part of both government agencies and ranchers. Stocking rates should be allowed to vary with forage production, to levels both higher and lower than existing norms. Management actions such as burning, rest, seeding, shrub removal or intensive grazing should be used opportunistically, when the right climatic conditions present themselves. This means that agencies must be able to authorize such actions very quickly or on a contingency basis, rather than on a pre-determined or business-as-usual timetable. The over arching goal is management that matches the ecological variability of the underlying resource.

Finally, a New Western Range must emphasize social, ecological and economic diversity. Cattle alone are already insufficient as the sole basis for most ranches, and a great deal more needs to be done to remunerate good land managers for the public values they produce: improved wildlife habitat, enhanced watersheds and flood control, open space protection and so on.

The old Western Range is broken and much maligned, but it has one singular achievement to its credit: It held vast landscapes of mixed private, state and federal ownership together in large, unfragmented units. The New West is rapidly eroding this legacy through economic, political and legal challenges, pushing the private lands into the hands of developers and exurbanites and the public lands into the sway of environmentalists and recreation enthusiasts.

If the public lands and a few additional "protected" areas were sufficient to sustain the ecological values of the West's rangelands, such an arrangement might not seem so shortsighted. But they are not sufficient, and once the process of fragmentation has begun it is generally impossible to reverse.

Working Wilderness

For most of the twentieth century, scientists and conservationists alike believed that ecological damage would heal itself if people were excluded and past disturbances such as livestock grazing were removed. It was largely on this premise that national parks and wildernesses were created, and it continues to inform a naïve belief in some quarters that Southwestern rangelands can be restored simply by removing livestock.

Take away that premise, however, and the wilderness model looks rather weak. The idea of landscapes untouched by humans has been discredited: Native Americans affected these lands, particularly by the use of fire; Euro-Americans have likewise affected them by suppressing fire. However beautiful and ecologically significant wilderness areas may be, they are not sufficient by themselves to sustain biological diversity—for that matter, all the public lands in the West taken together are not sufficient.

Santa Clara Fire Crew volunteers build erosion control structures to help protect an eroding bank and restore Rio Grande Cutthroat trout habitat along Comanche Creek in the Valle Vidal Unit of Carson National Forest, NM. (Photo by Deborah Myrin.)

Some way of integrating conservation and human use must be found, and rangelands are the most promising site for it: More than 400 million acres in size, roughly half private land and half public, they have been used and sometimes abused, but they are closer to a natural state than any other lands that have seen so much human occupation and activity.

The meaning of working wilderness is two-fold. First, it

Herding in the West Elk Wilderness near Paonia, CO. (Photo by Courtney White.)

insists that human work can be compatible with functioning wildlands. This is contrary to conventional and legal definitions, which conceive of wilderness as a place where "man is a visitor who does not remain," a landscape of recreation and contemplation rather than production and labor.

Second, it underscores the point that properly functioning wildlands do work, in the sense that they produce values for humans. Some of these values can be objectified or measured, others are wholly qualitative or subjective. The point is that they do not simply fall from the sky or happen by accident. They are produced by the interaction of natural processes and human activities.

The challenge lies in making these two dimensions of working wilderness complement each other symbiotically: cultivating human activities and livelihoods that work with, rather than against, natural processes.

A century ago, capital flooded the West in pursuit of windfall profits from grass and livestock, overwhelming the resilience of the range. For a time, ranchers, agencies and scientists endeavored to force the range to meet demands and fit models that it could not meet and would not fit: bulldozing mesquites, importing exotic grasses, imposing static carrying capacities.

But today, another tsunami of capital has arrived in search of profits from scenic homesites, and ranching has had to renounce its pretensions of control. It can no longer pay for such extravagant investments, and it has learned from experience that they do not work in the long run anyhow. Ranching now presents both a barrier to the current tsunami and a potential path towards a viable land ethic in the arid West.

This is both the need and the promise of a New Western Range.

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Working Wilderness can be purchased from Rio Nuevo Press at www.rionuevo.com.

A West that Works

Crossing the Generational Divide: the Trigg Experience

by Linda M. Decker

2003 Trigg Family photo.

"Gaaaawwd-daaaammn, let 'em fight over it when I'm gone."

That was my uncle Steve's estate planning. He and his two sisters had inherited a twenty-four-thousand acre ranch in eastern New Mexico, and he had run it for the last thirty years, doubling the acreage in the 1950s.

The "Third Generation" – the seven grandchildren of the founders of the ranch – all of us middle-aged – didn't really know each other very well and had never talked about the future. One day in 1994, cousin Steve planted a seed: "I don't want a piece of the ranch. What I want is for it to keep on being a ranch, and I want to come out here." The others chimed in: "Me too!" By October 1996 the goal was pretty well defined: to keep Trigg Ranch functioning as a cattle ranch forever, and for all the heirs to have access.

It was Sally, a lawyer by training, who knew what to do next. She began reading up on trusts, and searched out specialists who had worked with ranches in the Southwest planning for the future – who mostly told her that what we wanted to do couldn't be done. We said we were willing to put the whole ranch in trust, with the understanding there would never be any income paid out to a family member (except as an employee), and no individual would have the right to require the sale of any ranch assets. We were sobered but our determination began to grow.

My mother Adaline was careful not to say anything that would influence the Third Generation, except that she guessed the Trust was a nice idea. Her sister Louise, alas, had Alzheimer's and could take no part in the discussion.

And Steve, who had run the ranch for years? What he thought was anybody's guess.

Another unknown was the condition of the ranch. We could see that the range had deteriorated somewhat over the years, and mesquite and juniper have gotten a lot thicker. But the Aberdeen Angus herd, little modified from the cattle our grandfather Steve Trigg had trailed over from the XIT Ranch in Texas in 1917 – that was the first herd of Angus in New Mexico – was highly regarded by buyers and the calves and yearlings brought top dollar.

In good years the ranch made money, in bad years it lost money. But we didn't know how much; Steve could get pretty taciturn and the drawn-out "gaaaawwd-daaammn" with which he endowed every sentence took up a lot of the conversation. There was no debt;

but could we count on the ranch to support itself over the years? Fences always need work – but how much needed to be replaced? Windmills, roads, corrals – what condition were they in? The two main houses were pretty well run down, the little guest house was full of termites, the big barn was filled with junk.

And how many cattle were there? Even Steve didn't know. Years earlier, the accountant in town had bugged him until one day he appeared in her office, unrolled six feet of aerial photo of the ranch, and said, "You count 'em; they're all there" — along with the cottonwoods, junipers, and boulders. As Steve had grown older, he seemed not to have the energy to round up all the cattle every year; so especially in the rougher country and the most remote pastures, the cattle grew wild and wily, eating the good grass but hiding their calves.

So it was a gamble that the ranch would be financially healthy.

Trust

Meanwhile, there were the costs of talking to lawyers. Even with Sally donating her time, there were travel expenses and steep hourly fees as she interviewed ranch specialists. Sally talked Steve into agreeing that the ranch would contribute toward the legal fees, but there was no way to know what we were getting ourselves into and whether our hands would have to dig into our own pockets. We decided, however, to move ahead carefully.

Soon Sally recommended that we talk to Albuquerque estate and tax specialist Kenneth Leach, who was enthusiastic about our vision and as we moved ahead began calling us "The Magnificent Seven." By the time we all met with him, he and Sally had roughed out a structure: a "Trigg Trust" would own all the land as well as a Family Limited Partnership, which in turn would own the existing Trigg Cattle Company, which owns all the cattle, equipment, and improvements, and would operate the ranch as General Partner. Every lineal descendant of Steve and Bess Trigg is a trust beneficiary from birth and shares equally the right of access to the ranch.

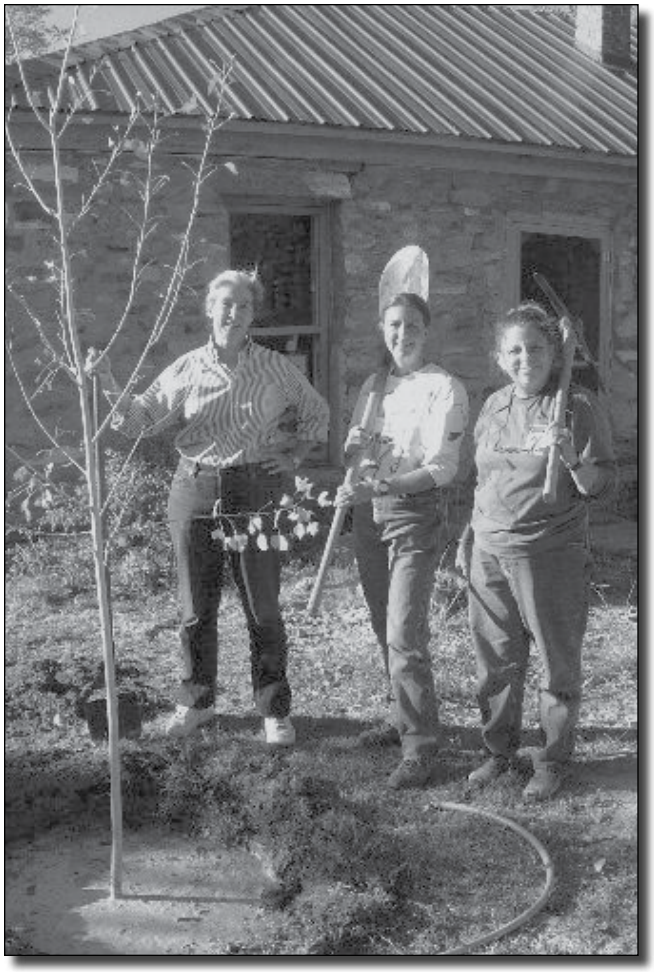
The lifetime of the Trust was a problem. In most states a trust has a maximum term of ninety-nine years. At that point, the chances of creating another trust with several hundred heirs gifting their interest into it would be exactly nil. A few states, however, allow perpetual trusts. Sally recommended South Dakota, and we pay a bank there a pretty stiff fee as "Independent Trustee"; but we agree that "perpetual" – whatever that may mean in this case – is worth it.

The Trust document was drawn up, but not before we had renamed it for both our grandparents: "The Steve and Bess Trigg Trust". By the time the documents were ready for us to sign in 2001, the Trust had become even more complex. In order to avoid death duties upon the passing of each heir, which would quickly crush the ranch, a number of separate "Crummey Trusts" had to be established to separate out each heir's ownership.

Finally, however, we could begin gifting our ownership of land and Trigg Cattle Company stock into the Trust, at a rate determined by gift taxes. In addition to the seven cousins, there were spouses, children, and grandchildren, for a total of twenty-one "beneficiaries" of the Trust. If Sally hadn't kept track of all the trusts and all the gifting, with documents of acceptance for each to be signed by the rest of us, the works would have been gummed up forever.

Steve cooperated with our creation of the Trust and gifted his own ownership into it; by the time of his death in 2002, that was complete, and his estate owed no "death tax". By November 4, 2004, all of us had given all our ownership to the Trust.

Family members installing a new septic system for the bunkhouse during the 2006 work week.



Linda, Kristen and Sally plant a successor to the beloved old cottonwood in the patio at Nana's.

Work Week

During the years of getting the Trust into operation, another thing of major importance had been happening. In August of 1997, most of the seven cousins and our spouses and children converged at the old ranch house where we spent happy summer visits with our grandmother, Nana. As we sat round the dining-room table – which Adaline and Louise had painted a vivid turquoise, and Polly added bright Mexican-style flowers on the chairs and sideboards – something became very clear to us: if we were going to come here to the ranch, we had to work on the house!

So the next summer 25 or so of us converged for a "Work Week". The guys concentrated first on shoring up the living room floor with welded steel beams across the basement. Meanwhile, others had begun scraping, repairing, reglazing, and painting the windows. Stevie started rebuilding the kitchen door, Tom replaced ancient electrical wiring in the basement, the children fetched and handed tools and helped gather clippings pruned from overgrown shrubs. After nine Work Weeks, Nana's house and the bunkhouse are in pretty good shape.

Meanwhile, nature took its course. In May 2002 Steve had a major stroke, and died a month later at age 85. On August 8th over two hundred people made the long trek from home – Trigg Ranch isn't close to anywhere – for a memorial under the cottonwoods in the Creek Pasture. Steve's beloved D6 Caterpillar carried his ashes to the three waiting Cessnas, followed by a bagpiper -- his only request -- and granddaughter Hilary with Jack Daniels and ice in the bucket of the skidloader. The rest of us followed to drink a final toast as the planes took off to scatter his ashes on Alamosa. The "missing man" formation as they came over the mesa made his absence all too vivid.

Suddenly the Third Generation was in charge. We had held a Ranch Meeting the day before the funeral, and carried out a plan we had discussed for several years: Steve's daughter Kristen was appointed Ranch Manager, with her husband Richard Holmes as Assistant Manager. We announced this at the memorial, along with the existence of the Trust: "Trigg Ranch is going to keep on being Trigg Ranch!"

Gradually the picture began to clear: the ranch was free of debt, and there was a cash cushion which grew as the wild cattle were sold. It was a time of drought, and the Holmeses let the herd shrink as the calf crop was sold off. Fences were in bad shape, and the windmills weren't much better. Meanwhile, Kristen and Rick were feeling their way into new roles, shifting from being on the bottom rung to being boss, a position which is uncomfortable for sweet, lovely Kristen. Much of the smooth transition has been due to the good will of longtime cowboys Guero Moreno and his brother Abel.

The Trigg Cattle Company

After several years of the new regime, we have realized several things. One, that the members of the clan have an amazing range of expertise to offer, from carpentry to operation of heavy equipment to sophisticated skills with electronics to financial management, and the younger generation is bringing some superb education and experience. Two, that it takes effort to

get together, covering distances and adjusting schedules. Three, that it takes effort for a bunch of introverts to communicate, and we're making an effort to use email, a newsletter, and conference calls to make plans and decisions.

The fourth thing we've realized is that we've moved a long way from Steve's one-man management, and that if we're going to call on this growing clan to contribute its varied skills, we need a structure to make it happen. So in the summer of 2006 we spent several days of Work Week on strategic planning.

It didn't take long for the Trigg Cattle Company Board to respond by suggesting committees for "operations" and "family", and a financial committee to plan for both. Already the voice of the "younger generation" had been heard and the Board was increased by two seats which are earmarked for them. When the Board reported at dinner that night, its recommendations were eagerly accepted and there was high energy as the self-appointed subcommittees immediately went to work.

Among the criteria adopted by the Board was one that had already been adopted by family meetings: all decisions are made by consensus rather than majority vote. Discussions apart from meetings are by email, and all emails are sent to everyone; no decisions will be made until there has been "sufficient" discussion. Of course it remains to be seen just how all that will work out! Certainly there is a high level of participation, with some vigorous disagreement. We're aiming to give Kristen and Rick the kind of support and encouragement that will make their job more comfortable, and also to call into play the varied and surprising skills of the clan.

Throughout the years since we first began talking about the future of the ranch, we've pretty well kept our eyes on the goals we first articulated: Trigg Ranch will keep on being a ranch, the land will be cared for and its natural beauty protected, and we and our grandchildren and their great-grandchildren will be able to come and learn about our ranching heritage.

Our focus is on operating the ranch profitably, and on the values which we intend to pass on to the hundreds of heirs who will come after us: the values of cooperation and patience; the importance of one's word and one's deeds; pride in the accomplishment of a job well done; and the skills, knowledge, and opportunity to work productively for the land and its people.

We intend to be – as Eric says – the last family ranch left standing. But we hope we'll have lots of company through the years.

Linda says she always felt like the town kid and is delighted to find her interest in history, ranch archives, and writing being put to use. Contact Linda at lmctrigg@clearwire.net.

All photos courtesy of the Trigg Family.

The "next generation" reporting on a new plan for the ranch during a family meeting.

A View from the Field

Shopping in Walsenberg *by Linda M. Hasselstrom*

"Democracy is based upon the conviction that there are extraordinary possibilities in ordinary people." --Harry Emerson Fosdick, American Baptist minister.

On my way to the artists' retreat in Vallecitos, New Mexico where I spent some fine time, I always stopped for groceries in Walsenberg, and ate lunch at one of the little adobe cafes whose workers spoke only Spanish. The grocery store was elderly, tiny, with narrow aisles, wood floors darkened by old oil with grime ground into it. Many of the customers were Hispanic, men and women trailed by several children, slowly moving between the shelves carefully comparing prices--as if they might have changed since yesterday--before choosing canned goods. I enjoyed shopping there because it eased me into the cadences of the Spanish conversations I'd have as I moved south toward the retreat. Also, by the time I reached the store, I'd have mentally inventoried the groceries I'd brought along, and knew what I'd forgotten.

Pushing my cart gently down an aisle, I noticed a small man, his jeans washed almost white, his clean shirt buttoned to the neck. He pushed his cart as far as it would go to one side as I passed and smiled at me, wrinkles crinkling around his brown eyes.

The next time I turned a corner in an aisle, there he was again. He stopped, lifted his hat, nodded and backed up. I nodded back and murmured, "Gracias" as I slipped past. Turning into the next aisle, I had to swerve to miss another cart crashing around the corner. A tall blonde woman barely glanced at me as she clattered past, wailing, "But there's nothing here!" Trailing her was a silver-haired man looking especially smooth and tanned in a powder-blue outfit with his hands in his pockets and a glum expression. "No fresh kiwis! No seafood!" shrieked the woman.

"Excuse ME!" I bellowed, trying to back out of her way as she slammed her cart into mine again, wrenching it around the corner. The small Hispanic man moved his cart aside again, lifted his hat and murmured, "Pardon" as she passed him, still complaining. I looked at him and shook my head, wishing I could apologize for her in Spanish. The old man grinned, shrugged, and reached for the tomato sauce.

As if we were part of some traditional dance, the man and I met several more times in the aisles, exchanging little pantomimes. He cupped a hand behind his ear and tilted his head toward the next aisle where the woman was berating her husband for bringing her to this WASTELAND where there was no FOOD no decent HOTELS and her husband muttered something we didn't hear.

I'd toss my head and put my chin in the air and look haughty and then we'd both grin.

Leaving, lugging our groceries in paper bags, we nodded at each other in perfect accord.

That hour in the little store reminded me that my behavior determines how I am treated when I shop, and in fact determines the mood of my day. When I move slowly along the aisles, I get a better sense of how much money I'm spending as well as having the opportunity to reach top-shelf goods for elderly ladies too bent to get them. That action earns me smiles and comments on my kindness or someone's grandchildren or the weather. Meanwhile the busy people who know what they want yell into their cell phones about the incredibly slow old geezers impeding their progress; they slam goods into their carts and scream at their children and snarl when one of them runs over my foot and I say, "Excuse ME!"

And I know that they are having the day they deserve: truly awful. These jerks get what they expect, and what they give. That's why those cliches exist: because they are true. "Smile and the world smiles with you." Try smiling next time you go shopping; you'll see the difference. Slow down even if you're in a hurry.

I believe that if you swagger around being rude with a frown on your face yelling into your cell phone, you will meet only the rudest, most abrasive and flatulent people, and have flat tires.

Linda's 'Shopping in Walsenberg' essay is part of an unpublished manuscript tentatively titled No Place Like Home.

Bridges

--for Jerry, and for Thomas Telford, builders of bridges

The first time you swerved to the roadside,
I thought you'd forgotten that in Scotland,
we had to drive on the left side of the road.
You were looking at a stone bridge,
double arches spanning the end of a loch,
aiming your camera at its stone curves.
I was more interested in the rainbow,
one multicolored vault over two in aged gray stone.

Your work is linking steel and concrete
to span wild rivers and dry washes
on Wyoming prairies;
mine is fitting words into stories.
I hadn't known you'd marvel at ancient bridges
just as I study poems by the masters.
My eye was tuned to standing stones,
the shape of poems waiting in the landscape,
yours to bridges,
but we began to see each other's dreams.

Once, you walked without pause onto a thin stone curve
hung two hundred years ago across a river
that howled for blood and bone.
After one cry, I held my breath;
you knew how true those men of your trade and art
fit key stones together, suspending granite
to carry coaches racing north and south
between kingdoms at war.

Suddenly I saw bridges everywhere.
I'd never noticed them before,
though one kind or another
upholds everything we do.
When my road swept across a bridge,
my eye was on a distant mountain;
when I walked trusting over creeks,
or the sea's mouth, I felt its teeth;
its fetid tongue left salt on my lips.
But I never looked down.
I never paused at the brink to study what
would hold me up, make my road smooth,
give me the illusion it was all one level path.

As quick as the chasm is bridged,
we forget how hard it was to toil
down one side and up the other,
clutching desperately at slick rock.

On the last day, we paused by a stream
to admire, together, an eight-arched viaduct.
Once it carried railroad cars
to the lead mines in the mountains,
a worker's job, requiring granite bones, steel muscles;
strength, not loveliness. Still,
the weight flew in graceful curves
from one pier to the next,
like a ball tossed by children,
or the metaphor that sometimes bounces
into the middle of a poem.

This causeway of words connects us,
builders of bridges;
ospreys fly beneath it,
a river churns and boils.

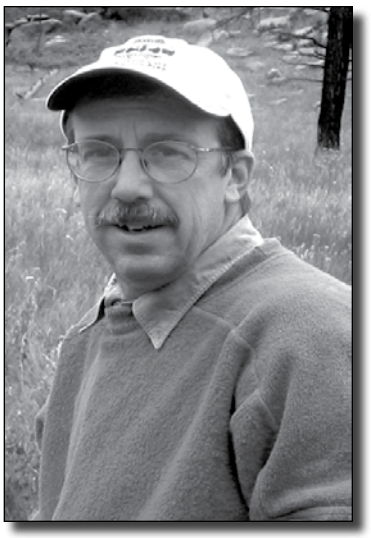
From Land Circle. (Golden, CO: Fulcrum, Inc., 1991) Reprinted with kind permission of the author.

Linda Hasselstrom believes that writing about her ranching community and what she has learned there contributes to preserving the quality of life rural people value. Her writings include: Leaning into the Wind; Woven on the Wind; Between Grass and Sky and many others. For more information on Linda M. Hasselstrom and her writing see www.windbreakhouse.com.

The Break of Day

A View from Malta

by Courtney White



A few years ago, while speaking to a roomful of ranchers in remote Malta, Montana, I was struck by the issue of bridging divides.

It happened during the roundtable discussion that followed the presentations. The first divide was a logical one – the ranchers' concern for the next generation. They said their children felt an irresistible pull and an undeniable push – the pull of better pay and different careers in big cities, as well as the push of diminishing prospects at home.

The list of challenges confronting the next generation was a familiar one: the rising costs of production; decreasing opportunities for off-ranch jobs; the commodity beef 'bottleneck' created by the near-monopoly of the national meat packing corporations; and a low-grade conflict between the 'Old' and 'New' West as the homes of urban emigrants began dotting the rolling hills south of town.

This last topic led to the second divide discussed that day: how to reach across the widening gulf between urban and rural populations.

The workshop speakers, who were there to present new ideas in land management, had some suggestions: consider direct marketing niche livestock products to urban residents; explore the social and ecological benefits of watershed-scale collaboration, which would include new neighbors; examine the new toolbox of restoration and other innovative land management practices; and try to figure out a way to get urban folks to compensate rural landowners for ecosystem services.

As I listened, I realized that another divide was being crossed. Ranchers and ecologists were talking about the same thing. One of the principle characteristics of healthy rangeland is its capacity to conserve essential resources locally, including soil and water. Without these resources in place, the ability of the land to recover from disturbance and degradation diminishes substantially. Its resilience, in other words, declines.

For the ranchers in the room that day, the essential resources to be conserved locally are children and hope. Without both in place, along with the soil and water, the capacity of the community to survive troubled times diminishes, possibly past the point of recovery.

But there was one more divide being crossed, though it took me a while to see it – the divide between the 20th and 21st centuries. What worked last century isn't going to help very much in the coming decades as the world begins to feel the deleterious effects of energy instability, food shortages, fresh water scarcity, and global warming. Business-as-usual isn't going to cut it in an upcoming century of possibly profound change. The coming Age of Consequences, as I've started to call it, will bite hard.

But I wasn't thinking about the ranchers – I was thinking about my fellow conservationists in the room.

Bison?

Seated in the discussion circle were representatives from two environmental organizations dedicated to transforming a large swath of northeast Montana into a "buffalo commons" – a dream first popularized by two Princeton University professors way back in the 1980s.

Recently, one of the organizations had taken a step toward making this dream a reality by purchasing a ranch in the Malta area and converting it to a bison preserve. The nonprofit and its partners are up front about their intentions: to purchase ranches from willing sellers and enlarge the preserve as much as possible.

The key selling point is tourism – specifically the

business of "wildlife recreation." People will come long distances, goes the argument, to see the buffalo home on the range again.

I heard the same pitch in Nebraska a year later, where two well-meaning conservationists insisted that the answer to the endemic "poverty" of the Sand Hills area was to get the ranchers to convert their land to a bison preserve and embrace the munificent benefits of tourism that would inevitably follow. The ranchers told me privately that they had a different definition of "poverty." In fact, they considered themselves quite wealthy.

Recently, the "wildlife recreation" argument has been touted by a small cadre of conservation biologists as a justification for an even more ambitious (and controversial) plan: to rescue elephants, lions, cheetahs, and other imperiled species from Africa and Asia and place them in a 'Pleistocene park' somewhere in the Great Plains.

Naturally, the cattle would have to go.

There are three objections to these plans, as I see it. First, they employ the Edward Abbey-era belief that conservation can only advance as far as cattle retreat. A recent article in *Orion* magazine promoting the bison preserve near Malta was explicit on this score: "If grazing is the problem," wrote Hal Herring, "stopping grazing, at least intensive grazing by beef cattle, is part of the solution."

The trouble with this argument, of course, is that it has been demolished by the progressive ranching movement. The only issue that remains, as far I can tell, is whether bison and cattle can actually coexist side-by-side somehow – which is a question for veterinarians.

Second, the bison preserve idea unfairly penalizes good stewardship. The message it sends to ranchers is this: "thank you for taking good care of this land, now leave." Furthermore, it adds to the very damaging belief among the general public that human activity and nature are mutually incompatible.

Why not put the bison someplace else? When I asked the Nebraska conservationists why they weren't proposing to buy up hundreds of thousands of acres of industrially-exhausted corn, wheat, and soybean land in their state and convert it back into native prairie for a 'buffalo commons' instead of leaning on the Sand Hills ranchers, I didn't really get an answer.

Third, the Achilles heel of the Pleistocene park concept is its dependence on tourism. If gasoline goes to $6-dollars-a-gallon, or more, someday – as experts say it will – then long-distance recreation begins to look like an unsteady house of cards. If you think that gas prices will never go that high, or that some miracle technology will come along just in time to rescue the internal combustion engine, all I can say is this: don't bet on it. More specifically, don't bet your economy on it.

But, there's a fourth, and much more important, reason why displacing ranchers for a 'buffalo commons' is a bad idea – unless we're willing to eat wild bison – and that reason is FOOD.

This is where the 21st century comes in.

50 Million More

In 1993, the U.S. Census dropped its long-standing survey of farm residents. The farm population across the nation had dwindled from 40% of households in 1900 to a statistically insignificant 2% by 1990, chiefly as a result of the rise of industrialized agriculture and the advent of globalization. The Bureau decided that a farm survey was no longer relevant.

This is worrisome news for two reasons. The first was identified by Aldo Leopold nearly sixty years ago when he cautioned us in A Sand County Almanac that "There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from a furnace."

The second comes from Richard Heinberg, a professor and widely published author on peak oil, who cautions us that in the not-too-distant future we will need all those farmers back again – not to tend bison for the pleasure of tourists, however, but to avoid famine.

Not only is the global population of humans projected to grow by a third in the next forty years, he writes in a recent paper, but the upcoming decline in the availability of cheap fossil fuel means our ability to grow food at current rates (and low costs) will decline as well.

In other words, there may be a "peak food" crisis to go along with "peak oil" in coming decades.

We have to start imagining a life post-fossil fuel right now, says Heinberg. "It will take ten years to begin to prepare the infrastructure so we need to start prepar-

ing now," he warns. "This is something which is going to dominate our lives over the coming decade."

As an illustration of the challenges that lie ahead, Heinberg points to Cuba in the early 1990s which suddenly lost its source of cheap oil with the collapse of the Soviet Union. Cuba's agriculture system, which was heavily based on petroleum, faltered. To avoid famine, Cuba switched rapidly, and with great difficulty, to a more localized, labor-intensive, and organic mode of production.

Among many changes made in Cuba:

- The Cuban government broke up state-owned farms into small private farms, farmer co-ops, and farmers markets;
- Farmers began breeding oxen for animal traction;
- People adopted a mainly vegetarian diet, reducing meat consumption to twice a week;
- Vegetable production increased while wheat and rice production decreased;
- Urban gardens were encouraged to go into production – and today they produce 50-80% of all vegetables consumed in Cuban cities.

The Cuban experience is not without precedent, Heinberg notes. Something similar happened in the United States and United Kingdom during WWII when fuel supplies became rationed. By the end of the war, 40% of vegetables in both nations were being raised in what were called 'Victory Gardens.'

But the main lesson from the Cuba experience is this: to be truly self-sufficient, and avoid famine, a nation needs 15-25% of its population to be producing food.

"Do the math for yourself," Heinberg writes. "Extrapolated to this country's future requirements, this implies the need for a minimum of 40 to 50 million additional farmers as oil and gas availability declines."

How soon will the need arise? "Assuming that the peak of global oil production occurs within the next five years," he continues, "and that North American natural gas is already in decline, we are looking at a transition that must occur over the next 20 to 30 years, and that must begin approximately now."

Heinberg cites four reasons why we should take famine seriously: (1) looming fuel shortages – which are being stoked by the current swap of food for fuel (ethanol) underway; (2) a growing shortage of farmers – not just quantity, the vital knowledge of HOW to farm is also disappearing; (3) an increasing scarcity of fresh water; and (4) global warming, which will adversely affect water availability and food production.

The answer is to completely rethink how we do business, including conservation. This means building stronger bridges among seemingly disparate groups, not pushing them farther apart.

"What I am proposing is nothing less than a new alliance among environmental organizations, farmers, gardeners, organizations promoting economic justice, the anti-globalization movement, universities and colleges, local businesses, churches, and other social organizations," he concludes. "This is clearly a tall order. However, we are not talking about merely a good idea. This is a survival strategy."

Which raises an important question: is it prudent to remove ranchers and take their land out of production – whether for a subdivision or a bison preserve – when we will need more of them over time, not less? Doesn't that make us less resilient, even in remote Malta?

Malta needs to feed Malta and southern Phillips County first and foremost. Building bridges can help.

So can economics. Gary Nabhan and Ken Meter recently wrote in The Quivira Coalition Journal that of the $11 million in agricultural sales that took place in Coconino County, Arizona, in 2003, only 0.5% went directly to local consumers. At the same time, Coconino county consumers purchased $37 million in meat, poultry and dairy products – virtually all of it shipped in from outside the county.

Nabhan and Meter estimate there is nearly $700 million of potential wealth in three counties – Coconino, Navajo, and Yavapai – that could be captured by local ranches and farmers, but is currently drained away to other regions. This trend, they wrote, needs to be reversed.

It needs to be reversed in Malta – and not just Malta. It needs to be reversed all over the 21st century.

- Richard Heinberg's article can be read at: http://www.richardheinberg.com/museletter/175
- Additional information on peak oil can be found at: http://www.energybulletin.net
- Nabhan & Meter's article can be found in Journal 29 at www.quiviracoalition.org.

Research

Private Ranchlands and Public-land Grazing in the Southern Rocky Mountains

by Colin B. Talbert and Richard L. Knight

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We compared environmental attributes of public and private ranch lands in the Southern Rocky Mountains. The private lands of these ranches were mapped from county land ownership records, while the public grazing allotments were identified from federal agency data. Physical and ecological land characteristics relevant to conservation were calculated from regional geographic information system (GIS) datasets in order to compare the public and private grazing lands. Our results indicate that the private grazing lands, when compared with the public-land leases, had lower elevations, richer soils, less steep topography, and greater stream density. These differences between the public grazing lands and their associated private ranch lands demonstrate the need to consider the larger landscape context in which public-land grazing occurs.

Introduction

The campaign to abolish livestock from public lands in the western United States is usually centered on the ecological impact grazing has on arid ecosystems, endangered species and riparian resources (Donahue 1999; Wuerthner and Matteson 2002). Not addressed in this struggle are the effects a cutback of public-land grazing might have on the associated private ranch lands. Federal statutes require ranchers grazing livestock on federal lands to own sufficient private ranchland, known as a "base ranch" or "commensurate ranchland," to sustain their livestock for part of each year (Rowley 1985). If access to forage on public lands is denied, the economic viability of these ranching operations might be compromised, leading to an intensification of ranch operations on the private lands or the conversion of these lands to exurban development (Sullins et al. 2002). Since these private ranches provide important wildlife habitat, open space, and critical ecosystem services, either of these possible outcomes could have important consequences for conservation at a regional scale (Weeks 2002). This dilemma was captured by Nabhan (2006) when he wrote, "The simplest fact about Western ranches is the one which most folks tend to forget: raising range-fed livestock is one of the few economic activities that produces food--and potentially ecosystem health and financial wealth--by keeping landscapes relatively wild, diverse, and resilient."

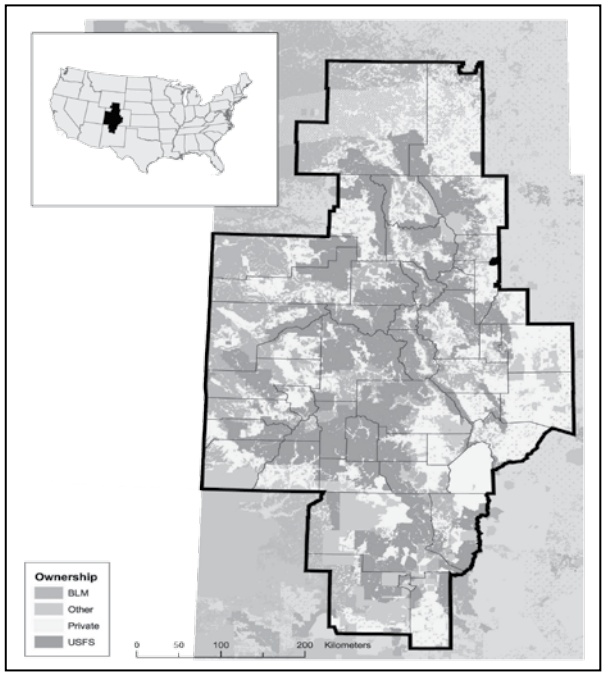

Figure 1. Land management within the study area.

Central to any honest accounting of conservation strategy is an awareness that the public and private halves of the western landscape are not interchangeable. In the western United States, Euro-American settlement followed a pattern of the most fertile, best watered and most desirable land being homesteaded while the unsettled lands remained in the public domain. In the Southern Rocky Mountains, this resulted in a general pattern of privately owned, biologically productive rangelands while the mountains and deserts remained in the public domain.

The need for conservation on private lands is made more pressing due to the rapid land-use changes occurring in much of the West. Residential development, once largely confined to urban fringes, is moving to rural areas at alarming rates. Already an estimated 25% of the private land in the conterminous 48 states has been converted to exurban development and the trend shows no sign of abating (Brown et al. 2005). Since amenity values and recreational opportunities are thought to be driving much of this development in the West, the private lands bordering public lands are often the most at risk of being developed (Hansen et al. 2002). One implication of spiraling human populations on previously rural landscapes is an altered natural heritage. Rather than species of conservation interest, these landscapes are increasingly being dominated by human-adapted species (Maestas et al. 2003; Hansen et al. 2005).

While the ramifications of widespread land-use change from ranching to housing development are not fully understood there is increasing concern about the lasting cultural, economic, and ecological effects (Knight et al. 2002; Sayre 2005). Conversion of working ranches to residential development leads to an increase in the number of houses and length of roads with corresponding consequences for the natural community (Mitchell et al. 2002). Research has also associated exurban development with increased spread of non-native species, an increase in the density of human tolerant species, a decrease in the density of specialist species, and avoidance by predators (Odell and Knight 2001; Hansen et al. 2005). The impact of these ecological changes might be exacerbated given that exurban development is concentrated on the biologically important private lands and effects likely extend some distance onto adjacent public land. Assuming that it is probably infeasible to revert exurban development back into agricultural land, the ecological changes due to this land-use conversion are likely to remain on the landscape. Whether the implications of these changes persist in a policy vacuum is the great question waiting attention in the rapidly changing American West

While the potential connection between continued public-land grazing and the ability of working ranchers to maintain sought-after open space and ecosystem services has been recognized by some, virtually no empirical data exist as to the biological value of these lands. The purpose of our study was to inform the public-land grazing debate by quantitatively comparing the biological values of private ranch lands with the public lands grazed by the private ranchland owners.

Study Methods

Our study area included 48 counties that roughly comprise the Southern Rocky Mountains of Colorado, southern Wyoming, and northern New Mexico (Figure 1). This semi-arid region is characterized by high elevation mountain ranges separated by lower elevation valleys. The issue of public land grazing in this region is particularly germane due to the heterogeneous mix of public and private land ownership, history of livestock grazing economies, and current trend of increasing development and recreational uses (Knight et al. 2000).

Since land ownership and management records reside in a myriad of county and federal entities, mapping all land involved in private and public-land grazing is no easy undertaking. Mapping the private portion of public-land ranches was accomplished by using publicly available county assessor records to identify large parcels owned by federal grazing permit holders. The public-land portion of ranches' federal-grazing leases were mapped using digital data from US Forest Service and BLM field offices. Though there is uncertainty with both of these estimates of public and private lands, they represent a best available and likely conservative estimate of the actual lands of interest for our comparison (Figure 2).

Physical and ecological landscape traits relevant to the biological productivity and conservation value of these lands were identified from available GIS datasets. Average elevation, slope, predicted soil productivity, and stream density were calculated for both the private and public grazing lands. Additionally, for

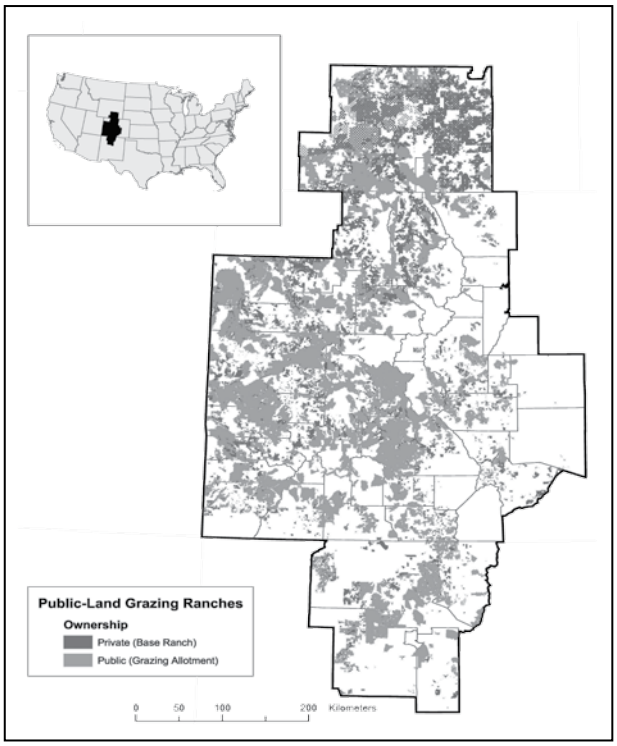

Figure 2. Base ranches with associated USFS and BLM grazing allotments in the Southern Rockies.

the portion of the study area within Colorado, lands important for biological conservation, as identified by the Colorado Natural Heritage Program (CNHP), were mapped.

Results

Our study identified 4,693,000 acres of private land owned by ranchers with federal grazing permits (Table 1). These private lands were associated with public-land grazing leases which comprised 14,079,000 acres. The base ranch properties were on average 904 feet lower than the public land, and 5.3 degrees less steep. Stream density on private lands was nearly twice that on the associated public lands. In addition, soil productivity was higher on the private lands compared to the public lands. Lastly, in Colorado the proportional area of CNHP potential conservation areas was greater on private lands than on public lands.

Although our study provides an accounting of differences in public and private land attributes, interpreting the absolute importance of differences at a regional level is beyond the scope of this study. However, if crucial areas for conservation in the American West tend to be on private lands, then our results indicate that base-ranch properties may be important conservation targets.

Since our region is characterized by its blend of private and public lands, the spatial context of private ranchlands might be an indicator of their regional conservation value. We evaluated this by comparing the relative proportion of the landscape comprised of private ranchlands between all private land in the study area with that component of the private land within 0.6 miles of public-land grazing allotments. The 4,693,000 acres of private grazing lands represents 21% of the 21,489,000 million acres of private land in our study area. But if we just look at the private land within 0.6 miles of the public-land grazing allotments, the proportion of private grazing lands increases to 43%. This observation supports the notion that working ranchlands provide a land-use buffer around our public lands.

Conservation Implications

The viewpoint that all livestock grazing is damaging to ecosystem health is being replaced by a better understanding of the interacting factors of grazing on rangelands (Knight 2002; Sayre 2005). Improved livestock grazing systems that mimic a natural grazing pattern show promise of maintaining ecosystem health while also allowing for economic use of our Western lands (Sayre 2001). The use of livestock as a stewardship tool, blending conservation with viable ranching on Western rangelands, is exemplified by the efforts of organizations such as the Malpai Borderlands Group, The Quivira Coalition, The Nature Conservancy and other NGOs. In light of the physical and biological limits of the public lands, conservation plans that do not incorporate private lands are only half a loaf.

In the public-land grazing debate, one unanswered question persists: will the continued use of public-land grazing keep the associated private lands out of development? It has been argued that once the market value of land reaches some point ranch owners will sell regardless of the availability of forage on public lands (Wuerthner and Matteson 2002). Research gauging ranch owner reaction to changes in federal grazing policy indicates a more complex story (Starrs 1998). Public-land ranchers exhibit diverse motivations for staying in ranching and differing perceived abilities to maintain their operations without public forage (Gentner and Tanaka 2002). Ironically, many

Table 1. Characteristics of USFS and BLM grazing allotments and associated privately owned base ranch properties.

	Area (million acres)	Mean Elevation (feet) (SD)	Mean slope (degrees) (SD)	Mean soil Productivity (SD)[1]	Mean stream density (feet/acre)(SD)
Base Ranch	4,693,000	7,431 (874)	5.2 (5.6)	8.9 (3.1)	17.23 (10.36)
Allotment	14,079,000	8,336 (1,571)	10.5 (8)	10.3 (2.9)	9.07 (7.44)

[1]Values range from 4, for the most productive soil, to 16 for the least productive soils.

ranchers persist in husbanding livestock, despite its marginal economic returns, for the same reason that new-Westerners buy a 35-acre ranchette: for the lifestyle (Starrs 1998; Gentner and Tanaka 2002).

Simplifying the grazing debate to a choice between livestock on the public land or condos on the private lands ignores the complex socio-economic heterogeneity of ranching in the West. Still, one important driver in the decision to retain ranching operations seems to be the continued availability of affordable public forage. It has been estimated that the 21,000 ranch families that use approximately 30,000 grazing leases on BLM and USFS lands, own about 107 million acres of private land (Gentner and Tanaka 2002). Let us ask a question and you provide your own answer to this public-private policy dilemma. In your estimation, is it a fair bargain if over one-hundred million acres of ecologically rich Western private lands are kept open and productive (the private half of the bargain) knowing that approximately 85% of federal lands are being grazed at some time of the year (the public half)? We are not sure how much the public values ranching, but, perhaps if they knew that by keeping private ranchlands out of development, they are helping keep the West open and out of development, now the second leading cause for the decline of federally threatened and endangered species (Czech et al. 2000).

Conservation easements, in which development rights are retired in perpetuity while allowing for continued use of ranches as working landscapes, are an emerging strategy for conservation on private lands. As evidence that stock producers ranch for the "lifestyle," seven state cattlemen associations have formed land trusts which presently have over 1 million acres of private ranchlands in easements (Knight 2007). The effectiveness of easements for conservation is still being assessed, but their utilization is increasing due to the pressing need to include private land in conservation strategies. Regardless, the potential for increased use of conservation easements on base ranch properties remains high, given that only an estimated 7% of federal grazing permit holders have currently implemented them on their base ranch properties. If reductions in public-land grazing accelerates, the selling of base ranch properties before land trusts have time to coordinate the purchase of development rights, this opportunity to realize permanent protection on these lands could be lost.

Federal grazing permits were implemented as a means of limiting rampant overgrazing of a communal resource and providing for improved individual stewardship of our public rangelands (Sayre 2005). While past degradation of the public lands by livestock undoubtedly occurred under this system, removal of livestock today will not necessarily ensure a return to previous ecological conditions. Instead of unilaterally eliminating livestock from federal land, conservationists might have more success working collaboratively with agency personnel and ranchers to make federal grazing more ecologically sustainable. As with many things of great import, Wendell Berry (2001) captured the tension -- and the answer -- between our rural and urban publics, and private and public lands, when he wrote:

"The most tragic conflict in the history of conservation is that between environmentalists and the farmers and ranchers. It is tragic because it is unnecessary. There is no irresolvable conflict here, but the conflict that exists can be resolved only on the basis of a common understanding of good practice."

Clearly, there is good work to do by us all.

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To mark our 10th Anniversary Year
The Quivira Coalition is pleased to announce its first campaign:

The Land & Water Fund

The funds raised will be directed to land & water-based projects that strengthen the resilience of organizations, communities, associations, landowners, or other enterprises in the region. The goal is to improve ecological, economic, social and land health, including the health of The Quivira Coalition.

Land & Water Funds will be applied to projects that improve land health through riparian & upland habitat restoration practices & maintenance, grazing management, ranch infrastructure repair, road rehabilitation, watershed planning, implementation of best management practices, or an educational activity that has a direct impact on soil, grass, or water.

Money from the Fund will be used in two ways:

1) **To support new and on-going Land & Water projects of The Quivira Coalition** (including those that are no longer supported through federal or state grants).

- **Valle Grande Demonstration Ranch**, a 36,000 acre public lands ranch located on Rowe Mesa, with upland habitat restoration projects, education and outreach events such as low-stress livestock handling clinics, a local pasture-raised beef program and use as a Grassbank (an innovative land management tool).
- **The Red Canyon Reserve** – a 320-acre wildlife and education reserve located southwest of Socorro, bounded on three sides by national forest, ideal for workshops and trainings.
- **Valles Caldera Grazing Partnership** – In 2007, we will partner with Jack & Pat Hagelstein in their livestock and outreach program on the Valles Caldera National Preserve.
- **Comanche Creek** – a multi-year restoration project on the Valle Vidal unit of the Carson N.F. focused on the Rio Grande Cutthroat Trout (see www.comanchecreek.org).
- **Cedro Creek** – a multi-year wetlands & watershed restoration and training project supported through 2007 with EPA Wetland Grants Program funds and located in a watershed just east of Albuquerque involving volunteers from the Albuquerque Wildlife Federation, PNM, local residents, school children and Quivira Volunteers.
- **Largo & Loco Creeks -** multi-year Induced Meandering projects with Bill Zeedyk on the Williams ranch near Quemado, NM, implemented by the land owner and volunteers.
- **Dry Cimarron -** a multi-year riparian restoration project near Folsom, NM originally supported with an EPA 319 (h) Water Quality Grant, landowner funds and many volunteer hours.
- **Mesteño Draw** a multi-year riparian and upland restoration project near Mountainair, NM, along the base of the Manzano Mountains within a Pinyon/Juniper Grassland ecosystem. Supported by landowner funds, the NRCS, Claunch-Pinto SWCD and Quivira Volunteers.

2) **The New Ranch Network (NRN)** The goal of this project is to respond to the specific needs of a landowner, association, or community – 'eager learners' – and give them whatever assistance we can through a network of ranchers, scientists, consultants, specialists, conservationists, volunteers and others. This assistance is in the form of Referrals, Coaches, Mentors, Specialists, a Grant Program, and a Web-based Directory. All NRN assistance is matched 1 to 1 by the local community or individual, either through a cash match or in-kind contribution.

OUR GOAL IS TO RAISE $100,000 IN 2007!

You can donate on-line at www.quiviracoalition.org. Click on Join & Donate.

~Comanche Creek~
Rio Grande Cutthroat Trout Habitat Restoration Volunteer Weekend

Friday-Sunday, July 27-29, 2007
Valle Vidal, Carson National Forest near Amalia, New Mexico.

Albuquerque Wildlife Federation (AWF) volunteers building vanes along Comanche Creek, July 2005.

Bill Zeedyk, Steve Carson, Craig Sponholtz and Restoration Trainees will lead groups of volunteers to build restoration structures (vanes, exclosures and various upland treatments) on the lower and middle reaches of Comanche Creek. This will be a great opportunity to learn hands-on how to design and install these treatments! Visit the Comanche Creek Website (www.comanchecreek.org) for a virtual overview of the project. Come for one or all three days. This will be our only workshop on Comanche Creek this year and our last as part of a Clean Water Act Section 319 (h) EPA Grant. We appreciate all our volunteers and their hard work that has made this project a success! You can register on our website at www.quiviracoalition.org, or for more information phone 505-820-2544 Ext. 3#, or e-mail projects@quiviracoalition.org.

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