

Experiences in Ecosystem Management:

**If All It Took Was Money,
Community-Based Conservation Would Be Easy**



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IN THE LATE 1980S, THE NATURE CONSERVANCY (TNC) became involved in a conservation project in northern Colorado. A historic ranch was threatened with development, and the family was looking for a way to keep developers at bay. In a final attempt to keep the land intact, the landowner negotiated with the State of Colorado to establish a state park. TNC acted as a consultant in this process, supporting protection of this site. Through TNC's strategic-planning process and biological inventory, conducted by the Colorado Natural Heritage Program, the ranch was identified as biologically significant. It was also one of the last remaining roadless river canyons along the Front Range of Colorado and lay at the crossroads between the short-grass prairie and the coniferous forest biomes of the southern Rocky Mountains. When it was evident that a solution would not be reached between the state and the family and that the only alternative was subdivision, TNC raised funds to protect as much of the canyon as possible.

By 1987, TNC had purchased in fee title 1120 acres, protecting approximately 4 miles of the canyon, called Phantom Canyon Preserve. At the same time TNC also acquired a 480-acre conservation easement protecting another 2 miles of the canyon.

From 1989, when the preserve was opened to the public, until 1995, Phantom Canyon Preserve was managed as an isolated site in a matrix of private land. During this period, TNC was going through a fundamental change in its approach to conservation. It was becoming increasingly obvi-

ous that to protect biodiversity on landscapes that were a blend of private and public lands, effective conservation strategies needed to incorporate the human communities into conservation efforts. TNC would never be able to buy enough land to ensure the existence of an area's natural heritage.

Through a strategic-planning process conducted by TNC and the state Natural Heritage Program located at Colorado State University, a 100,000-acre site was identified as having important ecological values for plant and animal communities. The site, called the Laramie Foothills, lay in a mountain valley situated on the east flank on Colorado's Front Range. The North Fork of the Cache la Poudre River winds its way through the area, forming spectacular granite canyons, including the Phantom Canyon Preserve. Stretching east to west, it connects the westernmost edge of the Great Plains to the beginning of the foothills of the Rocky Mountains, and north to south, it connects the southern end of the Laramie Plains to the northernmost edge of the Colorado High Plains. This valley is also a critical link of private land that, if protected, would reconnect the USFS Pawnee National Grasslands to the east with the coniferous forests and alpine tundra of the USFS Roosevelt National Forest to the west. This protection would once more allow traditional east-west migrations of species that had become increasingly fragmented by roads and housing developments.

At the same time, the TNC staff living and working in the community had begun to learn and appreciate the human history of the area. It was

evident that this was a culturally rich community that valued land health. Since the 1800s, generations of families had stewarded this land, developing intimate relationships, caring for the water and soil upon which their livelihoods depended. Ranching was the sole remaining economic use of the land that had persisted for over a century; logging, mining, and farming had all boomed and gone bust. Ranching is not an economically lucrative land use, but it is a sustainable use if grass, soil, and water are husbanded. Indeed, what land use that generates great profits is sustainable? By definition a sustainable economy is one that lies on the economic margin of profit and loss.

But this ranching community was threatened. Like many western landscapes, fast-paced growth was rapidly converting former rangelands at the valley's periphery into endlessly sprawling housing developments. Over 2000 ranchettes—small-acreage subdivisions—already rimmed the higher-elevation private lands to the north, south, and west, and abutted the Roosevelt National Forest. Land that was valued at a \$50 an acre for ranching was worth one to two orders of magnitude more for houses. When ranches went on the market, ranchers could no longer afford to buy this land; developers had the trump card. Land use was rapidly changing from a once agriculturally dominated landscape to a commuter landscape of city people “living country.” Water, essential for hay production, was gradually being shunted to the cities for lawns and swimming pools. In only 3 years, a share of water from the North Fork of the Cache la Poudre River had gone from \$5000 to \$40,000.

The biological communities, too, were under threat. Fire suppression, altered grazing patterns, water diversions, invasions of exotic plant species, new roads and subdivisions, and increased recreational activities were all fragmenting and disrupting the landscape at a larger and more intense scale than ever before.

Along with all of these changes, we were witnessing the loss of a generation of land stewards. People whose livelihoods were tied to the land through animal husbandry were being replaced by others who appreciated the land for its beauty but who had not taken the time to learn about its

human or natural communities. Where conversations once centered on the weather, now the weather was merely background noise. As these families of stewards were lost, so was their knowledge of land, water, grass condition, animal husbandry, wildlife, and stories of preceding generations. The “newcomers” among us, although caring, lacked the skills to learn and often did not even know the right questions to ask of the “oldtimers.”

Through listening and learning from neighbors, it became apparent that this was a place worth saving not only because of its biological diversity, but also because of its cultural heritage. In fact it was clear that we, TNC, would always be one of multiple newcomers and that the best way to help the Laramie Foothills would be to enable those landowners who stewarded the land to find sustainable ways to stay on the land. After all, they were the individuals who knew the place best and who were bound to the land by family and time. In such a rapidly changing landscape, could TNC work in this community to build partnerships that would achieve the conservation both of land health and of culture? It was essentially up to the community to decide; TNC was willing to try.

Slowly TNC, unknowingly at first, had embarked on what has come to be called community-based conservation. The Phantom Canyon Preserve Steward found herself spending time at the kitchen tables of ranchers listening, drinking coffee, and discussing the issues around land-use change. Likewise, time was spent participating in community events, riding and mending fences, branding and checking cattle. The TNC steward, who now lived in the valley and was also a landowner, had begun to ask questions of private landowners and public land managers, exploring issues and visions of land management that each held in common, and that separated them (Figure A).

These activities were taking place against a backdrop where, at the county level, anxieties were being fueled by rapid growth as Colorado was losing over 270,000 acres of open space each year to residential and commercial development. It was “boom time” once more in the Rockies, and people were taking a stand as either pro-growth or



Figure A. *A typical community meeting in the Laramie Foothills region. Can you spot the TNC representative in this group? If not, why not?*

anti-growth. At the county level, community meetings flared around private property rights laced with heated arguments and threats. In this atmosphere, TNC felt that a more positive approach would be to work on less-threatening projects that would bring folks together over issues that affected land and human health.

In such an environment, how could the Laramie Foothills community find a safe and cohesive place to work together cooperatively? Through community meetings and time spent walking the land and listening to the water, it became obvious that there was a pervasive and noncontroversial issue that threatened everyone: the invasion of weeds. TNC staff quietly took every opportunity to pass on information about weed identification and management. When asked, TNC responded to neighbors, and continued to work diligently on weed control on its own lands. Over time, it found itself being invited to work on neighboring lands and waited for other landowners to respond.

In the winter of 1998, neighbors came to TNC and asked if it would join forces to work on weeds. A small group was established, and a brainstorming meeting was held. The group recognized a common concern and committed to a long-term

weed project. A vision was defined, goals set, and tasks assigned. A larger community meeting was organized, inviting everyone in the watershed and purposefully including key players such as the Western Governors Association and the U.S. Forest Service. The group decided to start small and work on projects that ensured success. During the summer of 1999, four “weed tours” were hosted, visiting landowner’s properties, identifying weeds, and discussing how to control them. A local newspaper reporter became involved and ran a story on weeds.

By the end of the first season, we had over 30,000 acres enrolled in the project, including private, state, and federal lands. Unexpected partnerships developed, several of which involved individuals and groups who were at loggerheads on other issues. Who would have imagined an irrigation company board member, a nun, and a rancher working together? The group expanded their vision and set out goals for 3 years. The project was so compelling that some landowners quadrupled their monetary contributions. The Colorado Division of Wildlife (CDOW) found money to be used for weed control across their administrative boundaries on private lands, anticipating further

cooperative stewardship ventures. The CDOW's monies were leveraged with other groups and individuals, and TNC helped create a community-based weed coordinator. The group named itself the North Fork Weed Cooperative and began publishing a newsletter, *The Weed Roundup*, over 300 neighbors received the first mailing. Training workshops were held, and landowners prepared weed management

plans for their properties. These conversations and actions—based on a cooperative integrated weed management area—led to the idea of a cooperative stewardship area, including weed control, fire, and grazing. Although the group's challenges remain great, and weeds are still a threat, the community had demonstrated it could collaborate on issues that dealt with land health (Figure B).



Figure B. *Two community projects in the Laramie Footbills region, using cooperative and largely volunteer help: controlled burning (top) and planting of native vegetation (bottom).*

During this time, the listing of Colorado's first threatened subspecies of a mammal, the Preble's meadow jumping mouse, landed on the community's doorstep. Exurban development along the Colorado Front Range had destroyed most of this species' habitat, restricting it to a few pockets of land still devoted to ranching. The largest and most intact population in the state was found in the Livermore Valley, our community. Ironically, after generations of good stewardship that allowed the mouse to persist, landowners were now faced with the Endangered Species Act and restrictions on the very activities that had protected the subspecies.

The challenge was to respond positively. Through the determination and leadership of community members, we were given permission to embark on our own Habitat Conservation Plan (HCP). Landowners, realizing that their community was under threat, took the initiative to attend state meetings on the mouse to learn how to prepare an HCP. Local meetings were organized, and neighbors struggled with issues regarding the historic uses of their lands and what was required to help save the mouse. The U.S. Fish and Wildlife Service (USFWS) was invited to tour the valley with the landowners and discuss their concerns. Slowly a partnership was formed between private landowners, TNC, CDOW, and USFWS. Landowners worked hard to draft the first version of the HCP. They identified a core conservation zone along 216 miles of streams in the valley, totaling 3540 acres of land.

TNC continues to work in this community, viewing itself as only a partner with much to learn. It is clear that TNC's success in conservation actions is mostly due to a community willing to allow its participation. Slowly TNC has built trust, working hard to demonstrate its commitment to healthy and robust human and natural communities. Landowners continue to view TNC as a resource and a partner on land management and protection projects. As of spring 2000, TNC held conservation easements on 7350 acres and held title to 1660 acres—a far cry from when it owned a tiny preserve surrounded by immense lands whose owners it did not know. TNC's management responsibili-

ties and role have vastly expanded. More time and resources are spent each year on properties across the fence from TNC's boundaries. New ideas are no longer unusual in the valley, nor are diverse partnerships. TNC personnel are reminded that to be successful in protecting the area's natural communities, the human community must assume responsibility.

In an effort to strengthen community commitment to each other and to the land, an education program has been piloted. The mission of the Poudre River Ecology Project (PREP) is to implement a place-based river ecological curriculum for kindergarten through sixth-grade schoolchildren focused on conservation in the watershed. Three mountain schools have formed a partnership with public land managers, private landowners, conservation groups, parents, and community volunteers to implement an interdisciplinary river ecology project in the local community. Partners act as instructors and mentors as students undertake conservation projects at sites located within the watershed. Curricula are designed to (1) build a strong sense of place and a land ethic through experiential learning in the student's local community, while interacting with local people; (2) meet school district learning needs; (3) meet state curriculum standards; (4) enhance the current curricula by providing extended learning opportunities in the school's local community; and (5) provide meaningful scientific data to local land managers and landowners who are addressing conservation issues. Currently, 60 children once a month go out onto neighbor's lands, write of their experiences, ask questions, and discover the wonder of inquiry.

Although these successes have been important and have made a difference, not all projects have come to fruition, try as we might. We continue to be humbled by our limitations and realize that the challenges ahead of us will be more complex and require more creativity, patience, and compromise. The conservation of one ranch in particular exemplifies this.

When a fifth-generation ranching family asked TNC to help them protect their 16,000-acre ranch, it jumped at the chance. The family had worked for over 30 years to ensure that the integrity of the

ranch would be protected from development. The ranch had been identified as a critical component in the valley, being both culturally and biologically important. TNC believed it had “protected” the ranch because the landowner had approached it, the site was biologically important, the money was available, and the landowner was willing. Unfortunately, TNC underestimated two critical factors that can prevent successful conservation: the power and disruptive influence of minority voices in the community and the effects of a disconnected family.

Misinformation had been spread through the community via “neighbors” and members of the media that wanted sensationalism rather than facts. Indeed, in some newspapers TNC was labeled as “spies” sent to “seduce” the family. Hopes were dashed. Attorneys were paid huge amounts of money. Grants to buy the ranch were withdrawn. Most importantly, the family that owned the ranch carried a huge burden of worry, and TNC appeared to fail to keep a promise. After all that TNC had learned about community-based conservation, it had reverted to the “old way of doing business”—that is, it treated the project as just another

real estate transaction rather than a complex family issue. It took the quickest, easiest route, rather than show empathy and concern for the family problems. It hired renowned but distant lawyers who had yet to visit the valley. After a quiet time, thanks to a neighbor’s efforts, the family is starting once again to talk about finding ways to reconcile their differences, which may ultimately result in conservation of the ranch.

After working and living in this small valley, TNC has learned that successful community-based conservation is not just a matter of money, it is about successful relationships. In order to work, community-based conservation requires a long-term investment in building relationships, listening to neighbors, developing trust, promoting honest conversations, getting to know the human and natural histories of a place, a willingness to get dirt under your fingernails, an ability to make mistakes and ask for help, creative thinking, and a shared community vision. Community-based conservation is about becoming part of a place. Although it may require more time and effort than traditional conservation approaches, its results may last longer.

DISCUSSION QUESTIONS

The Scenario: You have just moved to a new place, a small, rural, agricultural-based community. As you drive into town, you notice “for sale” signs, new roads, and utilities being placed across the first piece of farmland you see. The majority of the land, however, remains in large private agricultural ownership. To the west lies an extensive tract of public land, albeit increasingly fragmented with private in-holdings. You have taken a position with a federal natural resource agency as the newly hired conservation biologist, the first on staff. You do not have a rural background as such, but are willing to work hard; you care about people and the land, and you are ambitious. Upon your arrival, experienced and established colleagues advise you “not to try anything new because you will

fail, as this community has tried everything and does not like newcomers.”

1. What is your initial course of action (a) with your co-workers and (b) with the community?

The list of tasks handed to you by your supervisor focuses on inventory and monitoring of species on your agency’s lands. Information in files identifies issues of concern in the community that are associated with economic sustainability and land-use change.

2. What should you do with this information?

You hear about a local community building project. Community members will be volunteering their time on Friday afternoons and Saturday mornings to renovate the Community Hall. No one has di-

rectly invited you, but there are posters in town inviting community participation. You ask your peers, and they say not to go; besides, part of it is during work time.

3. What do you decide to do and why?

As you are working on the project, people ask you why you would work for such a federal agency, and they relate stories of all the bad things your agency has done in the past.

4. How do you respond? Do you identify yourself as an agency person or as a community member while you participate in the project? (In other words, what “hat” will you be wearing, and how will you convey that to community members and your colleagues?)

You have been in the community now for about 6 months. Your agency at the national level is sued, and newspaper headlines read “X Species Listed as Endangered!” The largest potential habitat is identified in your watershed. A community meeting is called, and your agency is not invited.

5. What is your strategy for dealing with this issue?

Two years later, you have been making headway in the community. You now bear rumors of your transfer, and your colleagues kid you that you have “gone native.”

6. Evaluate how becoming part of the community has been a strength and a challenge for you as (a) a federal employee and (b) a new community member.