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# Review of *Political Ecologies of Cattle Ranching* in *Northern Mexico: Private Revolutions* by Eric Perramond

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#### **Review**

In an era where ethnographic fieldwork is often measured in weeks or months, rather than years, it is refreshing to read the product of a genuine multi-year ethnographic investigation of a phenomenon of passionate interest to me - ranching - the intertwined relationship of landscapes, livestock and livelihoods, and the community and political economy in which they are embedded. In this volume, Eric Perramond provides a historical and geographical account of the evolution and current state of private land ranches in the region of Río Sonora in northern Mexico. He argues for a complex view of ranches that appreciates the diversity in their ecological endowments, goals and management practices, but seeks patterns in the relationship between ranch size, labour allocations and land conditions. He traces the impacts of government policies, especially Mexico's storied history of rural land reforms; technical innovations and diffusions - notably introduction of exotic cattle breeds and grasses; market demand and trade policy on the nature and structure of ranching in the region. The material presented is based on a combination of archival documents, literature review, but most importantly nearly 200 interviews and field observations over several years. This book joins a growing number of political ecologies of ranching in the United States southwest, in good company with works by Sayre (2002) and Sheridan (1988). The work aspires to make up for shortcomings in the literature from conventional range (and animal) science, which until recently paid little attention to the human dimensions of ranching (i.e. the ranchers) and, Perramond contends throughout much of the book, is at best irrelevant and at worst responsible for major ecological and economic debacles in ranching in Sonora, Mexico.



Full disclosure: I am a range scientist and a scholar of the human dimensions of ranching and range management. While I fully agree with Perramond's critiques of much of the conventional range science literature and the misguided policies that have resulted from it, I take issue with the broad brush characterization of the science and profession that overlooks recent contributions on the human dimensions of ranching by range scientists (e.g. works by Huntsinger et al. 1997, 2010a, 2010b, 2012; Didier and Brunson 2004; Brunson and Huntsinger 2008; Kreuter et al. 2004, 2005, 2006, 2008; Coppock 2011; Coppock et al. 2009; Knapp and Fernández-Giménez 2009a, 2009b, Liffman et al. 2000 among others - these just in North America) as well as significant advances in ecological theory and practice - including non-equilibrium dynamics and resilience management - whose main proponents have been range scientists.

Chapters 1 and 2 provide the geographical and historical context for ranching in Río Sonora. Most important is the account in Chapter 2 of the origins and persistence of private ranches in Sonora, in particular the legal provision that properties with fewer than 500 head of cattle were considered 'small' and therefore not subject to redistribution in the most aggressive phase of land reforms. In the arid Sonoran region, 500 cattle require upwards of 20 ha per head, leading to sizable albeit rugged and dry tracts of land in the hands of individual ranchers. At the time of the research over 90% of the land in the study communities was in private ownership with a tiny fraction held by *ejidos* or other communal ownership. *Ejidos* are the Mexican system of communal agricultural land tenure established following the Mexican revolution (1910 to 1920), in which the land is held by the community but individual parcels are leased and worked by community members (*ejidatarios*).

From the perspective of a range scientist, Chapters 3 (Land, Labor and Resource Management on Private Ranches) and 4 (Ranch Ecology, Landscape Change and Power) are lacking in essential basic information about the ecology and management of rangelands and livestock in Río Sonora. For example, the section titled 'Herd Management' (Chapter 3) is really mostly about 'Grazing Management' and deals only with the spatial and temporal distribution of grazing, but says little about other critical aspects such as stocking density or rate, how decisions are made about the number of animals over time, whether they tend to be managed as one single herd or multiple herds on one ranch, and the criteria used by ranchers or vaqueros (cowboys) to make decisions about livestock movement or stocking within or between years. Debt and drought are mentioned as the major factors in deciding to sell, but that is all. The breed of cattle is mentioned in passing at the end of this section, as it is repeatedly throughout the book in the context of critiquing the promotion of exotic breed introduction. European, Asian and African cattle were introduced to the detriment of the spritely 'native' criollo or Corriente cattle, with dire consequences for food crops and water tables as cropland was converted to irrigated alfalfa to feed the lumbering and hungry European hybrids. This point is a very valid one, but the story is never fully unpacked and supported with data or narrative from the dozens of interviews and surveys Perramond conducted. Show us, don't tell us.

To a rancher or range scientist, 'herd management' is usually taken to mean the management of the actual herd - the type and breed of livestock, the herd structure (e.g. number - and age - of cow-calf pairs, bulls, yearling steers and replacement heifers), and how and why the rancher makes short- and long-term decisions about changing

these herd characteristics. For example, in arid systems north of the Mexican border, some ranchers opt to reduce or even liquidate their cow-calf operation in favour of making an annual decision to purchase stockers (yearling steers) to fatten and sell. Depending on the prices at the time, this can be a profitable decision as it eliminates the need to carry the herd through the forage bottleneck of the dry or cold season. Others might opt for purebred operation with fewer, higher quality animals that they can sell at a premium for breeding stock to other ranchers. Many others will reduce their herd selectively in times of drought based on specific criteria for the animals that are put on the truck first and those that are held until the situation is truly dire.

Similarly, there is a lengthy discussion of the different types of water resources (though strangely not a word about how water rights work in Sonora), but the section on infrastructure addresses only roads. Although road access is undeniably important, so are the miles of fence that many of these ranches must invest in (especially those that go in for 'rotational grazing'), not to mention corrals, barns or shelters. In many parts of the world the introduction of livestock shelters and especially barns where animals are confined and fed for part of the year is an important transition from extensive or nomadic traditions to more sedentary ranching, but nothing is said about the role of such structures in this system. It would merit mentioning if they do not exist, but most certainly if they do, what functions they serve and when they were introduced.

Finally, there is oddly no mention of the actual annual production cycle. When do breeding and calving take place (is it spread throughout the year, seasonal or variable from ranch to ranch?), and when are animals typically sold? There are references to milk production in several places, which implies that at least some of the cattle are dairy cattle, although the underlying assumption seems to be that they are primarily raised for meat. Although the text makes much of the differences in the small, medium and large ranches, and *ejidatarios*, it really does not say much about how the goals and methods of production differ in these operations (apart from different labour allocations) and whether the products that the small ranchers (or *ejidatarios*) produce are primarily for household subsistence or cultural obligations rather than market production. This is not nit-picking. This is essential information if one is to understand the nature and diversity of these ranches as production systems at the interface of landscapes and livelihoods. We need to know what they are producing, when, how, why, and for whom.

The ecological background (Chapter 4) is a bit more complete and draws on recent understanding about non-equilibrium dynamics in many semi-arid rangelands, though a range scientist is not totally convinced that the underlying ecology is well understood. For example, Perramond does not quite seem to grasp how changes in ecological structure, such as a transition from a black grama grassland to a mesquite shrubland, have consequences for the overall function of the landscape, as nutrient distribution becomes increasingly patchy and the interspaces between shrubs lose fertility and ultimately soil when no vegetation is present to hold it in place. The field investigation of vegetation cover and soil compaction, though valiant, is not terribly informative as it does not account for inherent differences in productive potential, plant community and compactability based on soils (ecological sites), though differences in landforms are considered. The differences between large and small ranches thus could have to do with the initial endowments of each type of property rather than how they are managed. This would be interesting, too, as it would imply

that the larger ranchers also have higher quality land (with greater productive potential and less vulnerability to soil loss).

The section in Chapter 4 on buffelgrass was the most interesting and insightful, presenting the dilemma in all its complexity, from the well-intentioned but misguided introduction of the exotic invasive species from Africa following the Dust Bowl to its vilification by ecologists in the USA north of the border, as a threat to biodiversity and ecosystem function (it alters fire regimes), and its continuing important role as a substitute or supplemental forage source on degraded Sonoran rangelands. This is a great example of a truly 'political ecology' in which a Sonoran rancher's saviour is an Arizona ecologist's nemesis, and the whole bundle was sold as part of a package deal promoted by technological experts in cahoots with purveyors of agricultural credit, all unwitting cogs in the Development Machine.

Chapter 5, with its focus on the gender dynamics of ranching, is a rare and valued contribution. It was a revelation to realize how many women own and manage ranches in this famously patriarchal culture, as well as the prominent role they often play in ranch decision-making. The chapter was the most engagingly written, grounded in four illustrative vignettes drawn from the many interviews Perramond conducted with ranch women. I only wish there had been more about the specific activities and decisions that the women engage in and the intra-household power dynamics and negotiations (with husbands, fathers and sons), as well as their knowledge of ranching and the role women play (or do not) in the social reproduction - or in the transformation - of ranching in Río Sonora.

Chapter 6 is the heart of this political ecology, focusing on the unequal distribution of land and grazing resources and its consequences for political and personal power. This chapter provides a complex and nuanced description of the most recent set of reforms which allows for re-privatization of the communal *ejido* lands, but suggests there is little incentive to privatize these tiny plots of mostly arid lands as they are clearly not viable units for production. What becomes evident is that the categories of landowners and land types are not clear cut, as some private land ranchers were once *ejidatarios* and a few still are. Oddly, there was little mention throughout the book about the role of informal institutions related to resource access or livestock management. In most ranching (not to mention pastoral) cultures these unwritten rules play as large a role as formal titles, laws and policies, in governing who grazes where and when, how labour is shared or how conflicts are resolved.

Perhaps the most interesting part of this chapter is a follow-up study that Perramond carried out to find out who was selling their private ranches and why (debt and drought, again). The chapter closes with a discussion of some of the approaches Sonoran ranchers are taking to diversify economically, ranging from branching out into pig and poultry production, to hunting, to eco-tourism and to small-scale off-ranch enterprises. He reports on recent conservation initiatives near the Mexico-US border and the emerging phenomenon of collaborative rangeland management in the USA (most famously the Malpai Borderlands Group; see Sayre 2005).

In the end, ranching in Sonora seems not very different from ranching north of the border, except for relatively fewer institutional obstacles to land access (compared to US public land ranchers). In the USA, as in Sonora, few ranches depend solely on livestock or even on-ranch activities for their income, and increasingly, one key to success

is economic diversification. The final chapter proposes eight recommendations that emerged from the fieldwork - all of which are sound and most of which would apply generically in almost any ranching or pastoral system (e.g. move to a 'need-based' and away from a 'product-push' extension model, promote training to provide viable rural livelihoods that encourage local children to stay in the community, emphasize the importance of local food supplies).

Where this book shines is in the well-wrought ethnographic accounts and the descriptions of the landscape, where I can almost smell the dust, mesquite and Tecate<sup>a</sup> mingled with horse dander and *machismo*. Please, Dr. Perramond, next time lose the 'hegemonic', 'Foucauldian' and 'neo-liberal' language; focus on the lovely and deep data that you collected so painstakingly; and make the most of it with your story-telling. The points you hoped to make would be clearer and penetrate deeper if they were more solidly grounded in the evidence and ethnographic narrative, and less tethered to the jargon *du jure* of your field. I am still pining to know the depth of substance of those years of interviews and observations, especially the local knowledge that was alluded to but never quite revealed. As it is, this book is an important reference for scholars of pastoralism and ranching in the region, especially anthropologists and geographers (the stated audience), but does not hold much for ranchers, or wayward range scientists like me.

#### **Endnote**

<sup>a</sup> Tecate is a popular brand of beer in Mexico.

#### Competing interests

The author declares that she has no competing interests.

#### Author's information

MEF-G is an associate professor in the Department of Forest and Rangeland Stewardship at Colorado State University. Her research focuses on the human dimensions of rangelands, including local knowledge of pastoralists and ranchers and community-based and collaborative rangeland management institutions in the USA, Spain and Mongolia.

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