

THE DESERET RANCH: AN ENVIRONMENTAL HISTORY

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Abstract

This paper outlines the project I am undertaking for my thesis. My thesis will examine the ecological history of the Deseret Land and Livestock Ranch. It will integrate quantitative and qualitative data to interpret a century of environmental change. While my research focuses on the period from 1891 to the present, it will also briefly review the long-term natural history of the region. This thesis will provide an opportunity to integrate traditional historical sources with new technologies. I will apply Geographic Information Systems (GIS) and Remote Sensing technology to graphically chart environmental change. These innovative historical sources, in addition to primary documents, will enable me to interpret the relationship between environmental change and such factors as evolving management practices and environmental ideologies.

Background

The Deseret Land and Livestock Ranch is located in northeastern Utah and Wyoming. The region is known for its cold climate. Nighttime temperatures often fall below freezing all year round. Because the ranch encompasses 201,000 acres, precipitation levels vary greatly with the aspect and elevation of a specific site. However, precipitation throughout the ranch is generally low. Due to the cold climate and low annual rainfall, the ranch's average growing season is only sixty days. Much of the ranch is characterized by mountainous terrain. Vegetation types, of course, vary throughout the region. The eastern portion, which spills over into Wyoming, contains juniper stands and sagebrush fields. The rest of the ranch consists of grasslands, brush, and occasional clumps of aspen and fir trees. The westernmost boundary is rugged terrain characterized by deep canyons. Because this environment is naturally inhospitable for use as a rangeland, the historical interaction between terrain and land use is imperative to understand.¹

Importance

A 1998 Associated Press article opened with the statement: "If the Forest Service needs a model for self-sufficiency that excels at

protecting land and wildlife, it should study a Mormon Church-run ranch."² This statement referred to the Deseret Ranch, which is one of the agricultural properties currently owned and operated by the Church of Jesus Christ of Latter-day Saints (LDS Church). Under the care of Manager Bill Hopkins, the ranch has become self-sufficient and has generated income—a sustainable prosperity uncommon to western rangeland environments. The term "sustainable prosperity" suggests that management practices enable the environment to continuously produce resources that, in turn, yield economic returns. The majority of western rangeland environments are either owned (as BLM and Forest Service Land) or are subsidized by the government. Even with significant subsidies, profits from western rangelands remain minimal while degradation escalates.³ Although the Deseret Ranch currently yields a profit and displays remarkable health, such has not always been the case. Therefore the ranch's history can be instructive in the areas of rehabilitation and sustainable rangeland use.

Because the Deseret Land and Livestock was established early in Utah's state history, it was intimately connected with both the environmental and the religious culture of the Mormon people. The motivations, needs, and beliefs of these settlers were written on the landscape. Since that time, nearly all of the owners and managers have belonged to the LDS

Church. Therefore, evolution in Mormon environmental ideology will be traced over this time. Management practices also evolved significantly over the 20th century. Therefore this thesis will trace the evolution in range science and its environmental ramifications.

This project is important because it applies innovative sources of historical data. GIS and Remote Image Sensing technology have only recently been applied to historical inquiry. This project will contribute to strengthening confidence in the use of new technology in the humanities. This project will also inform western landscape management practice. The recent economic success of the Deseret Ranch makes it an optimal site for study and emulation. There are currently a number of research projects being conducted directly on the ranch in conjunction with Utah State University, Brigham Young University, the Forest Service, and the Bureau of Land Management. Current projects include research on coyote reproduction, GIS-aided examination of vegetation change, inquiry on the effects of specific management programs on wildlife populations, and studies on the importance of outdoor recreational therapy. While I plan to incorporate data from these studies, my thesis approach adds an important historical context often missing from technical examinations.

Organization and Methodology

From 1891 to the present, ownership of the Deseret Land and Livestock Ranch has passed through the hands of four different corporations. Each change of ownership brought with it new priorities, management techniques, and environmental ideologies. The periods of ownership are not uniform in duration, however they serve as natural categories in which the information has already been distributed. While the earlier periods of ownership were the longest, more data sources are available for the latter periods. Therefore, dividing my thesis into four main chapters is logical. The first chapter will cover the period from 1891 to 1953, during which time the Deseret Live Stock Company was a joint stock corporation which experienced numerous economic and environmental extremes. The second chapter will include the period from 1953 to 1974, during which time three men gained control of the corporation and expanded economic programs. The third chapter will cover the period from 1974 to 1983 when

Joseph E. Hotung, a Hong Kong businessman with no background in range management, owned the ranch. The final chapter will consider the period from 1983 to the present. In this period the Church of Jesus Christ of Latter-day Saints has owned the ranch and implemented innovative management practices.

For the first two eras of ownership, which lasted from 1891 to 1974, I plan to use journals, correspondence, inventory reports, minute books, financial records, legal documents, photographs, deeds, oral histories, rudimentary maps, and some secondary sources on Mormon culture, range science, and the larger environment. I will view management practices and their economic and environmental ramifications both by studying these records directly and by reading between the lines. For the second two periods of ownership, lasting from 1975 to the present, I will use many similar sources. I will, however, augment these records with Geographic Information Systems analysis and Remote Sensing images. While these latter sources can be compared with and applied to earlier periods, they are only available for post-1972 research. These sources will enable me to establish visible environmental change during at least the last two periods of ownership.

Research Questions

For the purposes of my research I have developed the following list of questions.

1. How has the landscape been transformed over the past century?
2. What historical factors have led to the current prosperity of the Deseret Ranch?
3. How have theory and practice in range science and management interacted on the landscape of the Deseret Ranch?
4. What sociological factors have affected both resource management and ecological change?

Broader Scholarly Context

My thesis is influenced by several traditions in environmental history. The Annales School, which was introduced by French

historians, concentrated on long-term ecological change as an important historical process.⁴ Annales historians also sought to understand how the environment—the forces acting on a population—formed people's ways of knowing and being. I will weave a strand of the long-term natural history throughout my thesis. I will also, in keeping with the Annales tradition, concentrate on the social impacts of environmental change. While Annales historians focussed on aspects of culture—the human component and how it was shaped by nature, other historians, largely of the American environmental history tradition⁵ gravitated towards issues of science—changes affected by humans on the physical and biological environment. The current scholarly literature lacks both aspects of history skillfully woven together. I will attempt to place due credit in the accounts of human and environmental causation in my thesis. I will display how the human population affected short-term change on the Deseret Ranch and how the environment, its forces and limitations, affected culture.

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¹ Information in this paragraphs came from Jean Ann McMurrin, *The Deseret Live Stock*

Company: A Brief History, (Woodruff, Utah: Deseret Land and Livestock, 1991).

² A.P. "GAO Holds Up Deseret Ranch as Example to Forest Service," *Salt Lake Tribune*, March 7, 1998.

³ See: Karl Parker, *The Nature and Use of the Utah Range*, (Logan: Utah Cooperative Extension Service, 1969); William Rowley, *U.S. Forest Service Grazing and Rangelands: A History*, (Bloomington: Indiana University Press, 1996); Heather Smith Thomas, "History of Public Land Grazing" *Rangelands* 16, no. 6 (December 1994) : 250-5; Zaslowsky, Dyan. "Does the West Have a Death Wish." *American Heritage* 33, no. 4 (1982): 26-37.

⁴ See: Marc Bloch, *French Rural History* (Los Angeles: University of California Press, 1966); Ferdinand Braudel, *The Mediterranean, vol.1* (New York: Vintage Books, 1979); Emmanuel Le Roy Ladurie, *Montaillou* (New York: Harper & Row, 1966).

⁵ See especially: Donald Worster, *Dust Bowl* (New York: Oxford University Press, 1979); Richard White, *Land Use, Environment, and Social Change* (Seattle: University of Washington Press, 1979); William Cronon, *Changes in the Land Through Time* (New York: Hill & Wang, 1983).