Sustainable Ranching: A Rancher's Perspective

Nol Ward

Modern cattle ranchers in the western United States face the most difficult conditions since the formation of the industry in the 1860's. Our problems center around low cattle prices, loss of market share, rising production costs, higher taxes, increased foreign competition, continued over supply from hobby ranchers, degradation of public and privately owned grazing lands, increased government regulation, uncertainty of grazing privileges on federal rangelands, and uncertainty of various USDA government assistance programs. In spite of these problems, I see hope and opportunity for those western ranchers who can adapt to changing conditions. This means better use of scientific information, and new approaches to business, rangeland and beef cattle management.

I've had over 35 years of management and consulting experience with ranching operations. During this period of time, I've had the opportunity to observe in detail the practices of large corporate, profit-motivated ranching operations versus small and medium sized, independent operations. Key components of the most profitable ranching operations I've observed were economy of scale, sound range management, sound beef herd management, diversification of operations, sound financial management, aversion to government cost and income subsidies, and constant pursuit of useful knowledge. I will provide my perspective on each of these components.

Economy of Scale

Lack of livestock numbers and uniformity limits most ranchers marketing alternatives to the local auction or direct sales. Only a small percent of today's ranchers have the opportunity to increase their net income through retained ownership of their stocker and feeder animals. Still fewer have the opportunity to increase their net income through retained ownership of their cull bulls, cows and heifers. Small and medium sized ranching operations have no marketing power (McGrann 1997).

I have noticed that even the largest independent ranchers have little to no ability to influence the prices they must pay for supply in-puts such as fencing materials, supplementary feeds, fertilizer, fuel, and farm machinery. Today's supply firms are highly concentrated and the only people they are accountable to are their company's major stock holders. Small and medium sized ranching operations have no procurement power (McGrann 1997).

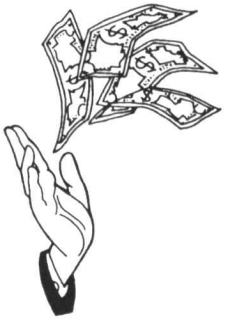
There are three basic methods that smaller operators can use to reduce costs and improve sale prices through economy of scale. Each requires ranchers to improve the efficiency of their ranching operations in one of three ways through leverage or debt, forming large ranching partnership or corporations, and/or forming cooperative purchasing and marketing alliances. The first method (improving efficiency through debt) depends heavily on properly timing the business cycle for success. Generally this alternative is suitable only for ranchers with sophisticated financial skills. The second and third methods require ranchers sacrifice some degree of their independence to improve their ranching efficiency.

The second method requires ranchers give-up their independence altogether and choose instead to become active stockholders of a large, corporate ranching operation. This alternative is recommended for persons wanting the best chance to receive maximize returns from their ranching investments.

The third method requires small and medium sized, independent ranchers to pull together as a collective force and form a cooperative purchasing and marketing alliance. In order to take full advantage of this alternative, ranchers must be willing to opt for a common marketing strategy, and follow standardized production and marketing procedures. Also, they must be willing to employ a professional to coordinate their alliance and represent them at the market. Whether or not small and medium sized, independent ranchers have the strength to work together to pursue a common long-term goal and objective has yet to be demonstrated.

Sound Range Management

Considering all the money that federal and state governments have spent on range research and management programs, I've always found it amazing that most ranchers have so little knowledge of this subject. The best single explanation I've found on what constitutes a sound range management program for ranchers is provided by Holechek (1996a). The most profitable ranching operations that I've observed have used Holechek's low input ranching approach for years, along with ideas that closely parallel his on managing climate and financial risk. It has been my experience that low input is an essential part of profitable and sustainable ranching.



Low input ranching means taking a very conservative approach toward range management and ranching in general.

Ranchers must avoid spending money on range management practices that will not save or generate enough money to pay for themselves, on a low risk basis. Ranchers must avoid any attempt to increase their income through overstocking, and they must be prepared in advance for times of drought and low cattle prices.

Also, included in my views toward low input ranching are such important practices as stocking the range at a conservative rate; opting for a proven, low cost, rotational grazing plan; and focusing attention primarily on cattle breeding, preventive herd health care, supplementation, marketing and diversification programs. Other practices that are a critical part of the low input approach include minimizing debt; consideration of stock and bond market trends in conjunction with current business cycle trends, when making asset allocation decisions; and consideration of the cattle cycle when making livestock marketing decisions.

I have found conservative stocking to be an essential element in the conservation of soil, water, forage plant and wildlife resources. It is also the key to obtaining maximum long-term productivity from the beef cow herd, and to controlling climate risk. When figuring permanent stocking rates, I always figure on stocking the range at 30–40% below carrying capacity. This practice is necessary to insure that improved range conditions can be sustained over an indefinite period of time and helps ranchers control supply going to market. This practice also helps prevent ranchers from getting themselves into financial wrecks during times of drought and low cattle prices. During times of above normal rainfall and abundant grass, I support the practice of ranchers carrying forward, purchasing or custom grazing stockers.

I have had great success with simple, low cost rotational grazing plans such as the Merrill system that allow preferred plants and preferred areas an opportunity for recovery. The Merril system can be easily modified for any part of the world by providing each pasture with growing season non-use every 3 or 4 years. Another grazing plan that' s worked well for me is the simple two pasture, switch-back system set forth by Dietz (1988). This system involves two pastures with each pasture grazed half of the growing season. The following year the order of grazing is reversed. I have found this system to be an effective method for improving forage production on the gulf coast and tallgrass prairies of central Texas.

Under desert and shortgrass prairie conditions, ranchers should strongly consider the grazing plan described by Holechek (1992). The rotation plan involves controlling where cattle graze by regulating access to water.

On public grazing lands, I encourage ranchers and range managers to consider a rotational grazing plan that incorporates the use of specially trained cowboys on horse back. Tactical herding is an effective method of managing grazing on open range and requires a minimum investment in ranch infrastructure. I believe it would be beneficial to ranchers and our country's public grazing lands, if more attention was directed toward taking full advantage of this type of grazing strategy. I also believe that this type of grazing strategy would be well received by natural resource conservation groups.

It has been my experience that any range management approach centered around the use of government subsidies (emergency feed), heavy stocking rates or requiring substantial investments in fencing, fertilizer, watering points, brush control and seeding will ultimately be a losing proposition for ranchers. Major mistakes are often made by would-be ranchers who buy rangelands with large amounts of fence and too many watering points relative to the amount of grass. Holechek et al. (1995) provides some useful information on the amount of capitalization required to effectively run desert and prairie ranches.

Weed and brush control is a necessary part of a sound range management program. The weed and brush control programs of the most profitable ranching operations that I' ve observed, have been oriented around prescribed burns, strategic grazing by ruminant animals, and spot applications of herbicide when necessary. I have found prescribed burning is an inexpensive and effective method of weed and brush control. It greatly improves forage quality and reduces supplemental feed needs. The practice can be beneficial to many desirable wildlife species such as white-tailed deer, bobwhite quail, and wild turkey. Prescribed burning in conjunction with conservative stocking has greatly increased calf crops and calf weaning weights on Texas ranches where I've worked. Vallentine (1989) provides good information on weed and brush control on rangelands.

Beef Herd Management

Over the years, I've noticed that smaller, independent ranchers fail to focus their attention on important beef herd management practices. Such practices include development of functional. general-purpose cattle; selecting bulls that meet minimum sire standards; exposing mature cows and breeding age heifers to bulls only during a restricted 60 to 120 day breeding season each year; scheduling each year's restricted breeding season to coincide with the peak growing season of the ranching environment; and the use of environmentally adapted, highly fertile breeding stock.

Obtaining top-quality herd replacements is a perennial problem because either poor quality or terminal-cross sires are used on a large percent of today' s beef herds. This compounds problems such as low fertility, poor mothering ability, slow growth, and inefficient use of range forage.

A high percentage of today's U.S. beef cattle population requires as excessive amount of costly feed input and care to be productive. Due to efforts to raise cattle with higher feedlot performance, the nutrient requirements of cattle have been raised to such a point that they cannot sustain

themselves on low quality forage, such as mature or old grass (Banister 1996). Cattle that can effectively utilize low quality forage play a key role in making ranching profitable and sustainable.

I consider it essential to use functional cattle, highly adapted to the local ranching environment. Cattle must have the ability to breed readily beginning as short yearlings, calve unassisted beginning as coming two-year-olds and produce highly acceptable offspring each year. Cattle should have an 11 to 13 year productive life span.

I consider 6 practices essential in a beef herd management program: Practice 1)—Breed for function, not form. Practice 2)—Do not combine different breeds together according to predetermined breed percentage (let what works best determine the percentage). Practice 3)—Meet minimum nutritional and preventive herd health care requirements at the lowest feasible cost. Practice 4)—Pursue the beef herd management objectives strictly on the basis of breeding best to best, year after year, (let temperament, reproduction, survival and calf weight gain largely determine which cattle are best). Practice 5)—Annually culling animals that do not meet certain minimum criteria standards of performance (unmanageable temperaments, non-breeders, problem calvers, cattle with physical and health problems, cows and heifers that fail to wean an acceptable calf, poor udders, etc.). Practice 6)—Always market culls as beef, never as breeding stock.

Ranchers should collectively make it their breeding objective to produce bulls better than their sires and cows better than their dams, and do it all within the boundaries of a closed-population of cattle. This is in contrast to a cross-breeding program that must return to a beginning point whenever the breeding cycle is completed. Genetic improvement created by a closed-population breeding program is measurable and permanent in nature, and can be transmitted over an indefinite period of time (Adams 1975).

Ranchers need a sound livestock marketing program. In order to be sound, the program must be based on a vertically integrated marketing concept that includes strategies for all classes of market animals. The program must also include having strength in numbers at the market place.

Diversification of Operations

Diversification provides ranchers with a great opportunity to increase their profits. However, most ranchers will need to improve marketing, financial and social skills to increase their diversification.

A method of diversification used by the most profitable ranching operations I've observed is the enterprise of high-tech meat packing and processing. The objective is to process and market grass-fed beef in the form of reputation building meat products. These meat products must be tasty, tender, lean and uniform in quality. Such products must also be free of additives perceived by consumers as being unhealthy. The primary goal of this initiative is to meet the needs of today's health conscious consumers.

Ranching operations should take advantage of new technological breakthroughs, such as precision flake cutting which make it possible to convert grass-fed beef into tender, tasty items with solid muscle texture. The range of products that can be produced by taking advantage of such new technological breakthroughs seems limited only by the availability of raw material and the imagination of the processor (Urschel Laboratories, Inc. 1980).

Other successful methods of diversification that I've observed include raising other kinds of ruminant and non-ruminant livestock, production of native plants for landscaping purposes, wildlife viewing, get-a-way lodging, managed hunting, trail trips, chuck wagon dining, managed fishing, production of rodeo stock, holding rodeos, and cowboy poetry and song. Ranchers may also consider such diversified ventures as educational seminars and work shops, special field days, summer camps, ecologically-based school programs, western riding schools, cowboy training schools, and schools for training ranch cooks.

Sound Financial Management

Large, corporate ranching operations have long recognized business cycles in their decision making. On the other hand, it is my impression that this aspect of ranching has been poorly understood by smaller, independent ranchers and by range managers. This has resulted in ranchers too often applying high risk, low return practices that concentrate rather than diversify their operations. The first discussion of business cycles and macro-economics relative to ranching that I've encountered are those of Holechek et al. (1994). I recommend Holechek (1997) to all ranchers interested in how strategic use of stock and bond markets can be used in asset allocation. Hopefully more work will be done in this area in the future.

I believe there is great opportunity for the range profession to develop software programs that allow ranchers to assess risk/reward of various management alternatives under different economic conditions. I encourage college range management programs to better incorporate marketing, investing, business management, and computer science courses in their curriculums. Narrow thinking, that focuses on only a few aspects of ranching, is the biggest

weakness I've observed in range management and animal science graduates.

Avoiding Political Risk

I have recently read several articles on how government cost subsidies contribute to instability and low profitability in ranching and farming. I strongly believe cost subsides such as the now discontinued USDA-Emergency Feed Program did much more harm than good. They have encouraged ranchers to overstock and, thus, contribute to excessive beef supplies and rangeland degradation. Holechek (1996b) accurately points out that even with USDA-Emergency Feed payments substitution of harvested feed for range forage is a quick way to the poor house. When drought strikes the only economically viable option is to sell cattle numbers down to what the range forage resources will support.

I am convinced the best way for ranchers to manage political risk is to avoid dependency on government programs. The most profitable ranchers I know use the government as a source of information and education, and not as a source of income.

I find the recent trend by the United States Congress away from agricultural subsidies most encouraging. The recent capital gains tax cut and changes in inheritance taxes should greatly help the ranching community. I would like to see legislation passed that would extend the tax-free period from one year (present) to at least six years on livestock liquidated due to drought. Keep in mind that the 1930' s and 1950' s droughts in the Great Plains lasted six years. The passing of such legislation would not only be beneficial to ranchers from a financial view point, but is essential in the conservation of soil, water, range plant and wildlife resources.

I would also like to see government income subsidies to the dairy industry be discontinued as soon as possible. Years of government interference in the dairy industry has contributed to natural resource degradation and over-supplying the market with milk and packer cows. I'm of the opinion that milk income subsidies and past government buy-out programs have done substantial harm to dairymen, ranchers, the environment and future generations. I believe that it's past time for the government to get out of the dairy business.

Few things worry ranchers more than threatened and endangered species. Under present policy, having endangered species on the ranch is more of a liability than a asset. Why can't government policies be modified so ranchers are rewarded rather than punished for providing and improving habitat for endangered species? Here I also favor tax breaks rather than government payments as the incentive.

The recent capital gains tax cut and changes in inheritance taxes should greatly help the ranching community.

Knowledge Importance and Use

The most successful ranchers I know read prodigiously and aggressively pursue useful new technologies. Modern ranching depends much more on being able to find and use new information rather than carrying on past traditions. It is my view that government extension programs have to some extent failed by promoting prescription approaches to ranching, rather than attempting to show ranchers how to find and use valid information. I've never encountered a government range extension man who recommended excellent basic textbooks on range management such as Vallentine (1989) and Holechek et al. (1995).

Rather than using the prescription approach to ranch management, I have had great success using a process that involves identifying various management alternatives and projecting their possible outcomes based on available research and practical experience. I like a simple approach to assessing possible financial outcomes from management alternatives using a ranch budget and different assumptions, such as demonstrated by Holechek (1992). Basically this involves developing the best case scenario for different management alternatives and throwing out those that do not yield more than money market interest rates or rates on federal government bonds that match the life of the particular investment. Remaining management alternatives can be further evaluated under most probable and worst case scenarios. The selection process should depend heavily on balancing ranch goals with probability for success.

Closing Comments

The most profitable ranching operations that I've observed are distinguished by the processes they use to solve problems and the way they approach maintaining an acceptable balance between the economic and environmental aspects of their business. Economically they pursue prosperity in ranching on the basis of: (A) lowest feasible input and risk; (B) slow, but steady range, beef herd and profitability improvement; (C) reducing cost and increasing profit potential, by improving operational efficiency; (D) pursuing optimum, long-term return to equity; (E) diversifying operations, for the purpose of maximizing per acre returns; (F) aversion to government cost and income subsidies; and (G) aggressive pursuit of new technology that will give them a competitive advantage.

Ecologically they promote the preservation and improvement of the environment by making the conservation of the soil, water, native plants, and wildlife an integral part of their ranching operations. Generally they emphasize the benefits of the attainment and maintenance of rangelands

in a late seral ecological condition. They think in terms of good stewardship of natural resources. They believe that it is essential for cattle and grasslands to coexist in harmony for the long-term. Rather than viewing natural resource conservation groups as adversaries, they see them as consumers and concerned citizens. When possible, modern ranchers should educate and inform these groups on the vital role sustainable ranching plays in preservation of open space, sustaining wildlife habitat, production of food and fiber, and maintaining a valuable cultural heritage.

Historic rates of return on western ranches have been quite low (2–5% on invested capital). However it has been my experience that many ranching operations can readily return 10% or more when managed using the techniques I've previously discussed.

Literature Cited

Adams, A., Jr. 1975. A booklet titled The Breeding and Selection of Braford Cattle. Published by Adams Ranch, Inc.

Banister, R. 1996. Keeping the Range in Range Cattle Production. Rangelands 18:21.

Dietz, H.E. 1988. Grass: The stockman's crop—How to harvest more of it. Sunshine Unlimited, Inc.

Holechek, J.L. 1992. Financial Benefits of Range Management Practices in the Chihuahuan Desert. Rangelands 14:280–282.

Holechek, J.L. 1996a. Drought and low cattle prices: hardship for New Mexico ranchers. Rangelands 18:11–14.

Holechek. J.L. 1996b. Drought in New Mexico: prospects and management. Rangelands 18:225–227.

Holechek. J.L. 1997. The Stock Market: what ranchers should know. Rangelands 19:14–17

Holechek, J.L., J. Hawkes, and T.D. Darden. 1994. Macro economics and cattle ranching. Rangelands 16:118–123.

Holechek, J.L., R.D. Pieper, and C. H. Herbel. 1995. Range Management Principles and Practices. 2nd edition. Prentice-Hall, Upper Saddle River, N.J.

McGrann, J.J. 1997. The Texas Cow-calf Sector—Economic Reality. Texas A&M University, College Station, Tex.

Urschel Laboratories Inc. 1980. Facts, Flakes and Fabricated Meats, Corporate brochure.

Vallentine, J.F. 1989. Range development and improvements. 3rd Edition. Brigham Young Univ. Press. Provo, Ut.

The author is a life-time cattleman, ranch manager and beef herd improvement consultant, P.O. Box 296, Cresson, Texas 76035. E-mail: barw@hpnc.com