

Bison:

A Promising Small Business Venture



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Introduction

Can raising bison be a viable enterprise for small farmers and ranchers? Trends in production and consumption of bison may provide answers to this question. This article highlights historical information on *bison* or buffalo, as they are widely known. It also discusses the restoration of the livestock to tribal lands, bison production by beginning farmers, and its consumption as an alternative meat source.

Historical Perspective of Bison, otherwise known as Buffalo

Until the 1500's, before European settlers arrived, North America was the roaming ground of the legendary bison; from Alaska to Northern Mexico, Western California to Western New York. Bison herds, numbering in the tens of millions traveled across the country and were known to be the largest community of wild animals in the world. They are part of the *bovine* family, to which cattle, sheep, goat, and musk ox belong. A Spaniard named Coronado in the mid-1500's gave the earliest full report of bison. He had made the journey out of Mexico, wandering as far as Kansas in search of the gold. Instead when Coronado and his soldiers got to Arizona and encountered their first flat top mountain, they found the land covered with "hump back cows" for as far as the eye could see. Coronado wrote about the American bison: "During May, they shed the hair on the rear half of the body and look exactly like lions" (Matthiessen, 1959).

Although bison were primarily inhabitants of the grasslands, they ranged throughout the eastern woodlands as well. English settlers on the Atlantic coast, present-day Washington, D.C. sighted bison as early as 1612. American bison are extremely hardy animals that are able to survive winter blizzards and killing summer heat, compared to domestic cattle that would perish on ranges where buffalo were able to live and thrive.

At first, a welcome food source, they soon became unwelcome competition for the domestic sheep and cattle, which would dot the fenced prairies by the turn of the century. In the 1800's the bison herd was estimated at forty million, but by 1883 there were no wild bison in the United States. Most of the forty million bison were killed within a fifty-five year period that began in 1830. By 1900, there were less than six hundred left in North America. A small devoted group of conservationists managed to save them.

Of all the species struggling toward extinction in the 1900's, none suffered like the American bison, slaughtered for entertainment and as a way to tame the West. More than the buffalo fell before the advancing frontier, for they were a part of a vast ecosystem linking grass, buffalo and Indians. The buffalo kept the Plains Indians alive. The bison was of economic value to the American Indian. It sustained their way of life, providing shelter, food, clothing, beds and fuel. It also provided strings for their bows, glue, thread, cordage, trail-ropes for their horses, coverings for their saddles, vessels to hold water, boats to cross streams and a form of currency that could be used with traders. The extermination of the bison spelled the doom of American Indian independence.

Even though the nineteenth century Americans did not know the intricacies of an ecosystem, some had enough perception to see that the eradication of the buffalo would hasten the eradication of the Indian and the opening of the prairie for cattle. No other animal had more of an impact on the ecology of the plains than the bison. By the weight of its hooves it kept tall grass out of the Kansas borderland and made the land clear for prairie dogs. The durable short grasses on which the bison fed needed the pounding of its feet for the germination of their seeds. Today buffalo-grass seed has to be mechanically abraded before it is sown on the managed range. Cattle cannot serve the same function as the huge bison herds, which migrated hundreds of miles northward in early summer and south again in the winter. Always on the move, the herds allowed the land to recover during their absence. When both Houses of Congress passed a bill in 1874 to save the buffalo, President Grant declined to sign it, apparently because his Indian fighters opposed it.

To see the grass prairies in something like their original richness of animal life, you must go to present-day Bison Ranges: The national Bison Range in Montana; the Wichita Mountains in Oklahoma; and Wind Cave National Park and Custer State Park in the Black Hills of South Dakota. Today, nearly ninety percent of the world's bison population is found on private land within the United States and Canada. Some private landowners did try to save the bison from extinction 100 years ago. Today landowners are equally important for the future increase of the bison herd.

Bison are Adaptable

According to a Bison World Magazine report, bison adjust well to most environments, and can be raised anywhere from Alaska to Hawaii (National Bison Association, 1998, 2000). In this report, Keith and Eva Yearout, farmers in South Haven, Kansas, offer some helpful advice.

"You can raise bison on small acreage," says Keith. "Most bison operations aren't very big." For those who might be considering a switch to bison, the Yearouts recommend talking to a producer first, to learn more about the animals. "Don't just go and buy them," Eva said. "Do some up-front research and save yourself the grief." Eva says many current producers learned by trial and error and want to help others avoid potential mistakes. The most important thing, she says, is to use your head when dealing with the animals. "You have to remember to be cautious around bison since they are still wild animals," she cautions. The Yearouts move their herd by luring them with range cakes, in order to get them to where they need to go. Their bison have access to minerals all year long. In winter they are fed prairie hay as well as wheat pasture. "They pretty much take care of themselves," says Keith. "A good worming is about as good as anything. We feed them range cakes in July and August to get them all to cycle. That's about it."

And that seems to work pretty well. In early May they were about a quarter done with the calving crop and things were looking about average, which is "usually 100 percent calving, on down to about 90 percent or thereabouts," says Keith. In the pasture, which takes up about 500 acres of the property, the bison graze on a variety of native grasses, including Bermuda. The bison are rotated around the pasture to different fenced-in areas, but not very strictly. Keith's advice is to start out with heifer calves to build a herd. He agrees that caution is necessary, but says switching to bison is worth the effort. "You can't beat on them because it won't work, you need patience. In the long run it's very rewarding. Everyone should try it. It's easier than you think."

Buffalo are Being Restored to Tribal Lands

In 1991 in South Dakota's Black Hill country, delegates from 19 tribes gathered to form the Inter-Tribal Bison Cooperative (ITBC). According to the Public Broadcasting Service's report, titled *Nature: American Buffalo-A Symbol of strength* (1992), ITBC delegates pledged to restore the bison to millions of acres of tribal lands — and to a central place in tribal life. Currently forty tribes have joined in this effort, helping to establish a herd of about 10,000 buffalo.

The Department of Agriculture (USDA) Purchases of Bison Meat

Selling bison meat has become a \$650 million industry. According to the Department of Agriculture, the number of federally inspected bison rose from 17,674 in 2000 to 19,483 in 2001, reaching 25,340 in 2002 (USDA, 2002).

In a March 22, 2002, National Bison Association (NBA) press release, NBA president Merle Maass noted that bison's nutritional attributes make the meat ideal for federal nutrition programs. "The low-fat, low-cholesterol, high protein and great taste of bison meat fits well with our national nutritional goals. "We in the bison business are pleased to be at the table with other protein sources." United Press International on May 2, 2002, reported that USDA was the largest purchaser of buffalo meat for its Food Programs (See Table 1).

Table 1

Agricultural Marketing Service (AMS) Bison Purchases 1998 – 2003			
Year	Pounds	Cost	Product
1998	356,400	\$1,283,040	Ground Bison
1999	2,019,600	\$7,035,160	Ground Bison
2000	0	0	1/
2001	0	0	1/
2002	840,000	\$2,774,716	Ground/Diced Bison
2002	612,406	\$1,531,015	Live Bison 2/
2003	4,200,000	\$12,003,634	Ground Bison 3/
2003	72,000	\$83,700	Canned Bison Stew
2003	262,152	\$495,938	Live Bison 2/
Total	8,362,558	\$25,207,203	Total

1/ No bison products purchased.

2/ These bison were processed into ground and diced products for the Food Distribution Program on Indian Reservations (FDPIR).

3/ The ground bison was purchases under Section 32C and 4(a) funds.

4/ These bison were processed into ground products for the Emergency Food Assistance Program (TEFAP)

Source: AMS
October 2003

In May 2002 buffalo producers joined with other food producers in a meeting with USDA officials to bid for contracts as part of the federal government's surplus food commodities program.

Beginning Farmers and Ranchers Prepare to Raise Buffalo

Audain Brown of AB Buffalo Ranch in Arkansas is excited by the prospect of having a small number of bison run on his ranch. He believes the niche market for bison is solid and will remain profitable. Audain is a beginning rancher, who had never farmed or ranched before. However, he owns plenty of land, has a good attitude, and is willing to take on this new challenge. Audain is on track with his plans of converting several acres into pasture, some to be covered with prairie grasses, that will include Indian grass, Little Blue stem grass, and Big Blue stem grass. These grasses will be free of chemicals. Also, there will be a handling facility, fencing and corrals. He is making every effort to learn and educate himself about ranching, through information from USDA outreach programs and private associations.

The Yearout family, mentioned earlier (page 2), began with an empty pasture and an idea to do something different. Sixteen years later they are still raising bison at Rock Hill Ranch. The Yearouts were raising cattle and hogs in 1983, when they decided to start raising bison. Today they have about 135 head on 1,500 acres, and are life members of the National Bison Association (NBA). The Yearouts' dedication to the success of the bison industry goes well beyond their NBA life membership. Keith is also president of the Kansas Buffalo Association. The biggest surprise to Keith--clearly a pleasant one--is that bison are so profitable. "We didn't expect to make great profits," Keith said. "It was surprising how much money came in so fast." Better still, they haven't had to work too hard at selling their bison. A small percentage of the Yearouts' bison go to other breeders' herds. The rest go to slaughter for meat. "We don't advertise. It's strictly word of mouth," says Keith. "We probably kill 18 to 24 a year. People know we have it, a few stores and a couple of restaurants." One customer comes up from Dallas, Texas.

The Yearouts' operation derives some of its profitability from the care they take of the animals from birth to finishing. A slaughter plant in Tonkawa, Oklahoma, about 25 miles away, helps. "They're inspected, vacuum-packed in clear plastic, and we're good to go," says Keith. Eva says she is glad they made the switch, because bison are really interesting animals and are easy to care for. "You don't have to worry about them too much, or pull calves," Eva said. "You give them water and feed and they are fine."

How USDA Can Help

Beginning or socially disadvantaged farmers and ranchers who want to enter the bison business or another farming enterprise should contact their local Farm Service Agency (FSA) office. FSA can provide direct and guaranteed loans to beginning farmers and ranchers who are unable to obtain financing from commercial credit sources. FSA can make and guarantee loans to socially disadvantaged applicants helping them purchase and operate family-size farms and

ranches. Further information about this and other FSA programs is available from local USDA Service Centers or on the FSA website at: www.fsa.usda.gov.

Think Bison in Your Future

USDA listed 1.17 million farms with sales less than \$10,000 in 2002, an increase of 11,780 low producing since 2001. In 2003 we anticipate a new surge in the profit growth of small farms and ranches. Bison ranching could be a contributing factor to this growth, and could have a small but significant future as an important niche in the livestock market.

***NOTE:** The author is Executive Assistant in the Office of the Chief Economist (OCE), U. S. Department of Agriculture. Views expressed in this article are not necessarily those of the OCE or the U. S. Department of Agriculture. Also, attached is a list of the references and credits used to by the author in preparing this report.

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