University of Wisconsin
Whitewater

College *of* Business and Economics

Fiscal and Economic Research Center

REDCO BISON MEAT PROCESSING PLANT STUDY

by

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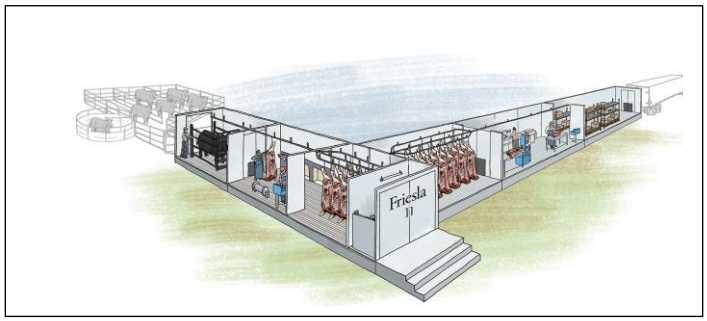
Overview

The Fiscal and Economic Research Center (FERC) of University of Wisconsin-Whitewater has assessed the feasibility of operating a meat processing plant in South Dakota on the Rosebud Reservation. The goal of this feasibility study is to give an overview of capital requirements and challenges that come with the meat processing systems to update REDCO's feasibility study (BlueStone Dec 2020) and related them to Friesla models.

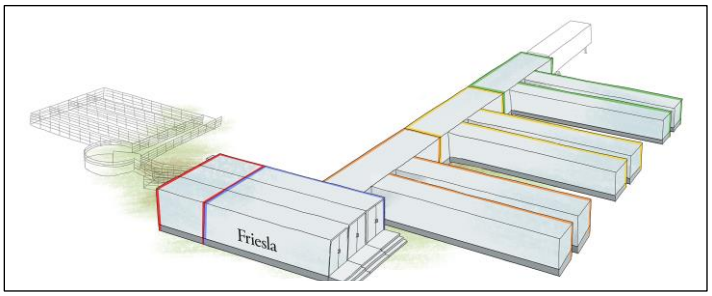
Summary of Major Findings and Conclusions

A meat processing plant on the Rosebud reservation can fulfill the need of managing their own meat product on their reservation, from production to market. This plant would provide local jobs on the reservation and secure locally sourced food including that from the REDCO regenerative bison herd. It would further allow the Rosebud Sioux Tribe and its members to add another economic step to their Food Sovereignty and Security initiative and wellbeing of their citizens.

Considering previous reports which have included both the mobile processing unit as well as the modular stand-alone unit in a combined analysis, the FERC (Fiscal and Economic Research Center) recommends a scenario where Frielsa's PS-1 processing plant operates by itself as a stationary plant. Our study shows that it is the most profitable after scale up. The client's values of food security make it all the more appealing to bring this processing plant to the reservation. When REDCO's regenerative bison herd reaches the carrying capacity for its land, an annual supply of about 500 bison should be secured for the processing plant. Additionally, other local sources include the SGU herd which should annually contribute about 40 head of bison. The value of this stand-alone modular processing unit, aside from being USDA compliant ready, allows REDCO to set up a specific location for ancillary expansion as other meat animals (i.e., beef) are added to the system.



Other considerations for the free-standing modular processing unit, is the ancillary hook ups for water and waste, herd management for USDA inspection during kill and handling, and additional modules that can be added for multi-use purposes, biproducts of the bison such as tanning hides, or a training center for workforce development.



Modular Harvesting Unit (MHU) scenario

Another scenario explored for this study included the same Stationary plant that was in scenario one (Friesla PS-1), but this scenario includes the addition of Friesla's Mobile Harvesting Unit (MHU). After an

analysis of this scenario there was no advantage to including a mobile unit and a stationary modular unit as a combined project. The FERC does not recommend using the Frielsa's MHU, and PS-1 systems jointly. The FERC does not see any advantage in revenue. Friesla's PS-1 meat processing system has the ability to fully process bison within its stationary plant. The MHU cannot further process bison past harvesting, and quick chilling the carcass. The costs that come with the MHU only change the location of harvesting which the FERC sees no advantage in.

Additional Scenario

An additional scenario studied was the use of Friesla's HP-1 stationary plant by itself. A system different from units involved in the two previous scenarios. The HP-1 system is capable of slaughter and processing of bison. Due to its low capacity, it was disregarded because it did not fit REDCO's needs with its capacity limit on such a small processing plant.

Market Overview

Within the United States and international markets, such as Japan and Mexico, there is growth demand for bison meat products. An increase in demand means the supply will increase to meet demand, and a study shows that South Dakota has the highest success rates in farms that could maintain production levels with a switch from beef to bison. Within the region studied including parts of Montana, Wyoming, Nebraska, North, and South Dakota 69% of the study areas could successfully switch to bison from cattle. With in South Dakota the success rate increases to 88% including Todd County and the Rosebud reservation. REDCO meat processing plant will need to target herds of bison outside the reservation to meet capacity needs to follow the study as written. A target should be made for new herds of bison such as the Antelope Creek Bison (Mission, SD.) which started their switch from beef to bison in 2017.

In the United States, number of bison processed each month is growing. According to USDA statistics, the monthly average of bison processed throughout 2022 is 6,250 head. Up from a monthly average of 5,525 bison head processed in 2020, and a 4,725 monthly average in 2018. Demand is also growing, with marketers claiming growth in demand of over 10 percent according to the National Bison Association. The market for bison processing is not saturated and has an outlook of growth in demand from consumers, and supply from bison farmers and ranchers.

With the positive outlook for bison in the local region, establishing Friesla's PS-1 is advantageous. The plant's modular design allows you to increase capacity in the future by adding modules to adapt to future needs.

Other considerations on processing systems

Bison are native to North America, but under the USDA are considered “exotic” or non-amenable. For exotic species USDA FSIS inspections are voluntary. Contrary to the federal level, in South Dakota bison are amenable animals and the state will provide an inspector to inspect the slaughter and processing at no charge to the processor. Scheduling with slaughter inspections will need to be a consideration in herd management.

Friesla’s meat processing system has the capabilities to harvest chickens. A primary consideration for processing various animals is “the separation of time and space” In other words, there may be a requirement of a day to clean before processing a different type of animal in the same environment. Friesla offers some equipment specialized for meat poultry processing. However, the quantity of poultry processed per year sets a guideline for poultry inspection. For a number below 20,000 poultry per year, the inspection may be waived. Check State requirements (https://aib.sd.gov/poultry.html). Federal Food and Inspection safety requirements (https://www.fsis.usda.gov/), and/or any tribal food handling requirements.

Due to prospective location being on the Keya Wakpala development land cost has been figured to be zero throughout the report.

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Major Findings

- The FERC recommends Friesla’s PS-1 processing plant with Bison being the primary animal processed using local sources and bison herd in the region of South Dakota. The modular model can be adapted to a start-up scenario and expand in modular form to accommodate various processing expansion needs .
- The State of South Dakota will provide an inspector for the processing of Bison with no charge to the processor.
- South Dakota inspection of bison allows sales across state borders.
- Outlook on Bison in long run is positive as claims of better nutritional facts and environmental factors drive demand.
- The south central region of South Dakota lacks any large meat processing plant, making the market more open for opportunities of a smaller plant to start and grow.

Scenario 1

In this scenario, the Friesla model PS-1 is solely used. The production capabilities when dry aging for 7 days is 50 head of bison per week. The bison would be entirely processed through this plant, from slaughter to cut and wrapped and stored in a freezer portion of the facility. Using a safe estimation of 200 days (40 weeks) of processing, maximum capabilities of this processing plant would be 2000 head of bison in a year. After scaling up production to 1000 head of bison a profit is reached.

Revenue

In this updated study total value of a processed bison from REDCO's previous feasibility is used.

	Grass finished Bison
Processed Bison Total Value	$4,125.57

PP&E- Capital Costs

Property cost has been removed since the preliminary location is on Keya Wakpala Development. Friesla models are turnkey processing systems that include equipment, installation, and other post purchase services including some training.

	Plant Cost
Friesla Model PS-1	$2,600,000

* 50% financed at 5.5% interest rate for 10-year term

**Depreciated over 7 years

Purchase Price

	500 Bison	1000 Bison	2000 Bison
Purchase Price of Bison	$2000	$2000	$2000
Total Purchase Price	$1,000,000	$2,000,000	$4,000,000

Packaging Costs

	500 Bison	1000 Bison	2000 Bison
Bison Packaging	$45/ hd	$45/hd	$45/hd
Total Cost of Packaging	$22,500	$45,000	$90,000

Labor Costs

Cost of labor in the processing facility 8 hours/day, 5 days/week, and 40 weeks/year. Hourly wage is based on BLS mean wage for butchers and meat cutters.

PS-1	Production 500-1000	Production 2000
Per hour labor costs	17.15	$17.15
Number of Laborers	4	8
Total Labor Costs	$109,760	$219,520
*Taxes and Benefits		
Total Labor Costs	$163,979	$327,958

Marketing

Marketing costs will be approximated at 1% of revenue, because a low marketing budget is estimated to be required for a small meat processing plant.

Marketing Costs	1%

Operating Costs: Monthly

Friesla states lower operation costs with their models, but due to limited data we cannot confirm.

Water	1000
Gas	1500
Electric	4,500
Total Utilities	$7000
Repairs, Maintenance and Supplies	$2000
Miscellaneous	$3000
Total Monthly Overhead	**$12,000**

Indirect Labor

Plant General Manager	**140,000**
Financial Controller	$115,000
VP of Sales	$115,000
HACCP Manager	$70,000
Office Manager	$30,000
*Taxes,Worker Comp, Benefits	
Total Indirect costs	**$562,123**

Income Statement

Year (Bison Processed)	Year 1 (500)	Year 2 (1000)	Year 3 (2000)
Revenue	$2,062,785	$4,125,570	$8,251,140
COGS	$1,000,000	$2,000,000	$4,000,000
Gross Profit	**$1,062,785**	**$2,125,570**	**$4,251,140**
Expenses			
-Processing Plant	$330,079	$352,579	$561,958
-Marketing	$20,628	$41,256	$82,512
-Indirect Labor	$562,123	$562,123	$562,123
-Property, Liability, and Product Insurance (3% of PP&E)	$78,000	$78,000	$78,000
EBITDA	**$71,955**	**$1,091,612**	**$2,966,547**
Interest	($72,513)	($66,927)	($61,035)
Depreciation	($371,286)	($371,286)	($371,286)
Net income(loss)	**($371,844)**	**$653,399**	**$2,534,226**

Scenario 2

Friesla's Mobile Harvest Unit (MHU) is used to match Harvest needs of Friesla's PS-1 meat processing system at 10 head per day, which is about a 75% of maximum production capacity of MHU as stated by the manufacturer. MHU is used in addition to the PS-1 Processing plant to do mobile harvest, and do further processing at the stationary plant.

Revenue

	Grass finished Bison
Processed Bison Total Value	$4,125.57

PP&E- Capital Costs

In this scenario cost of land is still removed. All equipment for processing is included in the cost of the Friesla model, but an allotted cost estimate for a truck to move the mobile unit to temporary locations is included in the MHU cost to make it functional.

	Plant Cost
Friesla Model MHU	$453,000
Truck	$75,000
PS-1	2,600,000
Total MHU Cost	**$3,128,000**

*50% financed 5.5% for a term of 10 years.

**Depreciated over 7 years.

Purchase Price

	500 Bison	1000 Bison	2000 Bison
Purchase Price of Bison	$2000	$2000	$2000
Total Purchase Price	$1,000,000	$2,000,000	$4,000,000

Packaging Costs

	500 Bison	1000 Bison	2000 Bison
Bison Packaging	$45/ hd	$45/hd	$45/hd
Total Cost of Packaging	$22,500	$45,000	$90,000

Labor Costs: PS-1

Cost of labor in the processing facility 8 hours/day, 5 days/week, and 40 weeks/year. Hourly wage is based on BLS mean wage for butchers and meat cutters.

PS-1	Production level 500-1000	Production 2000
Per hour labor costs	17.15	$17.15
Number of Laborers	4	8
Total Labor Costs	$109,760	$219,520
*Taxes and Benefits		
Total Labor Costs	$163,979	$327,958

Labor Costs: MHU

Estimated processing 8hours/day, 5 days/week, and 40 weeks/year.

MHU	
Per hour labor costs	$17.15
Number of Laborers	2
Base Labor Costs	$54,880
*Taxes and Benefits	
Total Labor Costs	$81,989

Marketing

Marketing costs will be approximated at 1% of revenue because a very small budget for marketing is expected to be used for a small meat processing plant.

Market Costs	1%

Operating Expenses: PS-1(Annual)

Friesla states lower operation costs with their models, but due to limited data we cannot confirm.

Water	12,000
Gas	18,000
Electric	54,000
Total Utilities	$84,000
Repairs, Maintenance and Supplies	$24,000
Miscellaneous	$36,000
Annual Operating Expenses	**$144,000**

Operating Expenses: MHU (Annual)

Estimated 10 head of bison harvested per trip, trips taken to meet weekly production capacity of stationary plant, which is processing for an estimated 40 weeks of the year.

	Unit Price	1 trip/week	5 trips/ week
Fuel for truck -$/mile -Trip Distance	 $1.5 100 miles	$6,000	$30,000
Water	$4.5/head	$1,800	$9,000
Maintenance and supplies	$250	$10,000	$50,000
Insurance (3%PP&E)	$15,000	$15,000	$15,000

Indirect Labor

Plant General Manager	**140,000**
Financial Controller	$115,000
VP of Sales	$115,000
HACCP Manager	$70,000
Office Manager	$30,000
*Taxes,Worker Comp, Benefits	
Total Indirect costs	**$562,123**

Income Statement

Year (Bison Processed)	Year 1 (500)	Year 2 (1000)	Year 3 (2000)
Revenue	$2,062,785	$4,125,570	$8,251,140
COGS	$1,000,000	$2,000,000	$4,000,000
Gross Profit	**$1,062,785**	**$2,125,570**	**$4,251,140**
Expenses			
-Processing Plant	$330,079	$352,579	$561,958
-MHU	$111,595	$139,395	$235,989
-Marketing	$20,628	$41,256	$82,512
-Indirect Labor	$562,123	$562,123	$562,123
-Property, Liability, and Product Insurance (3% of PP&E)	$93,840	$93,840	$93,840
EBITDA	**($55,480)**	**$936,377**	**$2,714,718**
Interest	($87,205)	($80,319)	($73,237)
Depreciation	($446,714)	($446,714)	($446,714)
Net income(loss)	**($589,399)**	**$409,344**	**$2,194,767**

Bison Feasibility

As the client already has an established Buffalo Range, this portion of the study will focus more on the local competition, market size, and overall feasibility of a bison farm in tandem with the meat processing plant.

Executive Summary

The U.S. bison meat market was valued at USD 338.5 Million in 2021 and is expected to reach USD 587.3 Million in 2030, expanding at a CAGR of 6.5% during the forecast period. With the rising demand for bison meat as a healthy and sustainable alternative to beef, with low fat, calories, and cholesterol, it is expected to drive the overall market value higher in the forecasted period. Growing awareness about bison meat as a premium option in the food service industry and increasing availability of bison meat is anticipated to drive the market upward.

The U.S. bison meat market can be divided into three separate categories: product type, end-use, and distribution channel. The three product types of bison are fresh bison meat, frozen bison meat, and processed bison meat. The frozen bison meat segment held a market share of 46.3% in 2021 and is expected to expand at a high CAGR of 6.6% during the forecast period, owing to the increasing demand for frozen bison meat in the recent years. Frozen bison meat remains fresh for several months when packaged properly.

Based on end-use, the United States (U.S.) bison meat market is segmented into residential and commercial. The commercial segment held a market share of 66.6% in 2021 and is expected to expand at a CAGR of 6.3% during the forecast period, due to the rising demand for bison meat products in the US, such as ground bison, bison steak medallions, bison flank steak, bison patties, bison ribeye steak, bison skirt steak, and others.

Based on distribution channel, the United States (U.S.) bison meat market is segmented into online retailers and offline retailers. The offline retailers segment includes supermarkets, specialty stores, and others (meat shops and convenience stores). The online retailers segment held a market share of 27.4% in 2021 and is expected to expand rapidly at a CAGR of 7.0% during the forecast period. Many companies have increased their consumer base by partnering with online distributors and retailers. The increasing penetration of various online portals in the US is expected to boost the segment during the forecast period.

Finally, the U.S. Bison meat market can be divided up based on region. The Midwest Currently holds the highest share in the market at 27.8%. The market in the Midwest is expected to expand at a CAGR of 6.8% during the forecasted period, which can be mostly attributed to the rise in marketing for bison products as well as the increased awareness of the benefits of bison meat and increased availability.

Market Drivers

Growth in demand for premium meats: Consumers are interested in unique and high-quality food products, which is expected to fuel demand for specialty and premium meats, such as bison meat in the US. Growth of the bison meat market in the US is attributed to a combination of health & sustainability concerns and culinary appeal. Bison meat is a more sustainable and environmentally friendly alternative to beef, as bison are raised on open grasslands and require fewer resources compared to conventional beef cattle. These factors are anticipated to drive the bison meat market during the forecasted period.

Health and nutritional benefits: Bison meat is low in fat, calories, and cholesterol. Bison meat has a high proportion of protein, an excellent source of vitamins, and palatability quality traits compared with beef. Furthermore, bison offers nutritious red meat product that meets the demands of a growing number of health-conscious consumers looking for alternatives to conventional red meats without sacrificing an excellent eating experience. These factors are projected to increase the demand for bison meat among health-conscious consumers.

Market Restraints:

High price and competition from other meat: Bison meat competes with other meat in the market, such as beef, pork, and chicken. This competition makes it challenging for bison meat to gain a market share. Additionally, a lack of consumer awareness limit demand for bison meat. Bison meat is not as widely available as beef and pork, which makes it difficult for consumers to find bison meat in some areas. The limited availability of bison meat is considered to hamper the market growth during the forecast period. Bison meat is generally more expensive compared to other types of meat, such as beef, and pork. High price limits the demand for bison meat among price-sensitive consumers. These are some factors anticipated to hinder the bison meat market growth during the forecast period.

Market opportunities:

New packaging technology: A new packaging technology, nitrite film packaging, has been approved by the FDA and USDA. Therefore, there is the possibility of improving retail color stability when applied to bison meat. Bison meat is darker than beef; hence, the color stability is a major factor that limits the expansion of fresh meat marketing. Nitrate film packaging extends shelf life and eliminates retail losses, due to poor color stability and early browning. The new packaging technology is anticipated to offer opportunities for the expansion of the bison meat market in the coming years.

Locally sourced meats: Bison meat is associated with the American West and Great Plains regions, where many bison farms are located. This creates an opportunity for producers to market their meat as a locally sourced and authentic product, which is appealing to consumer's interest in supporting local agriculture.

Product differentiation and development: The decision to purchase and consume a bison meat product has a significant influence on the marketing of bison meat products. Therefore, it is necessary for bison meat marketers to build on positive images and correct misperceptions about bison meat through promotional strategies. Bison meat is a popular ingredient in several dishes across the US, which presents an opportunity for bison meat producers to expand their businesses. Increasing awareness, distribution, and consumption of bison meat products to ensure the sustainability is anticipated to offer

new opportunities for market growth during the forecasted period. Bison meat has large market opportunities by using product differentiation and product development strategies.

Product Type Analysis

Fresh Bison Meat: Fresh bison meat is known for its high quality and distinctive flavor. Fresh bison meat tends to be dark red in color compared with other red meat. Fresh bison meat is used in a wide variety of recipes and cuisines. Fresh bison meat is used as a substitute of ground beef in various recipes. Fresh bison meat is healthy and a sustainable source of protein. Fresh meat is believed to be healthier and more nutritious form of meat when compared to the frozen meat. Many households buy fresh bison meat over the processed ones due to nutrition issues.

Frozen Bison Meat: Bison meat can be frozen and stored for longer duration, which is convenient for busy consumers. The increasing availability of frozen bison meat, especially in grocery shops, specialty meat shops, and online retailers, makes it easy for consumers to purchase the meat. Frozen bison meat provides a viable option that is healthy and sustainable. Freezing the buffalo meat not only helps in stopping the aging of the fresh buffalo meat but also maintains the flavor. This allows for wider distribution and a longer shelf life for the product.

Processed Bison Meat: Processed bison meat products, such as sausages, jerky, and burgers, offer consumers a convenient protein source. Consumers are focused on the sustainability of bison meat as a protein source. Innovations in the processing and packaging of bison meat products, including new techniques and technology, are making it possible to create a wide range of products with long shelf life and an improved flavor profile.

United States Bison Meat Market Value (USD million), By Product Type (2015-2030)

Product Type	Fresh Bison Meat	Frozen Bison Meat	Processed Bison Meat	Total
2015	91.2	138.3	70.5	**300.0**
2016	94.9	143.4	72.5	**310.7**
2017	98.9	148.9	74.6	**322.4**
2018	103.4	155.1	77.0	**335.6**
2019	108.4	162.0	79.8	**350.1**
2020	102.8	153.1	74.7	**330.6**
2021	105.8	156.9	75.9	**338.5**
2022	111.1	164.2	78.8	**354.1**
2023	117.4	172.9	82.2	**372.5**
2024	124.5	182.8	86.1	**393.4**
2025	132.7	194.0	90.5	**417.1**
2026	141.8	206.7	95.6	**444.1**
2027	152.1	220.8	101.2	**474.1**
2028	163.7	236.9	107.5	**508.1**
2029	176.6	254.6	114.5	**545.7**
2030	190.9	274.3	122.2	**587.3**
CAGR 2022-2030	**7.0%**	**6.6%**	**5.6%**	**6.5%**

Note: The frozen bison meat segment held a 46.3% value share in 2021. This segment is projected to account got the largest share of the market in the forecasted period. Additionally, the fresh bison meat segment is expected to expand at a CAGR of 7.0% between 2022 and 2030, making this a potentially lucrative opportunity.

End-use Analysis

Residential: Bison meat is consumed in households for cooking a variety of dishes, as it is a substitute for beef and other meats in many recipes. Bison meat burgers are a healthy alternative to beef burgers. Bison meatballs are a great addition to pasta dishes and are served as appetizers. Bison meat is an excellent alternative to stews, as it adds flavor and nutrition to stews while being tender and juicy.

Commercial: Bison meat has various commercial usage, in restaurants, food service providers, and healthy food stores. There are 6934 restaurants currently offering Bison on their menu. Bison burgers, steaks, and roasts are all popular menu items. Bison meat is often sold at healthy food stores, due to its low-fat content and high protein level. Bison burgers are almost as common as chicken wings at pubs in California and Colorado.

United States Bison Meat Market Value (USD million), By End-use (2015-2030)

Product Type	Residential	Commercial	Total
2015	97.8	202.2	**300.0**
2016	101.7	209.0	**310.7**
2017	106.0	216.4	**322.4**
2018	110.8	224.8	**335.6**
2019	116.1	234.0	**350.1**
2020	110.1	220.5	**330.6**
2021	113.2	225.3	**338.5**
2022	118.9	235.2	**354.1**
2023	125.6	246.9	**372.5**
2024	133.2	260.2	**393.4**
2025	141.8	275.3	**417.1**
2026	151.6	292.5	**444.1**
2027	162.5	311.6	**474.1**
2028	174.9	333.2	**508.1**
2029	188.6	357.1	**545.7**
2030	203.8	383.5	**587.3**
CAGR 2022-2030	**7.0%**	**6.3%**	**6.5%**

Note: The commercial segment held a 66.5% value share of the market in 2021. The segment is expected to account for the largest share in the market during the forecasted period. The residential segment is expected to expand at a CAGR of 7.0% between 2022 and 2030

Distribution Analysis

Online Retailers: The sale of goods and services over the internet is known as online retailing. In online retail, a business or individual sells retail products and services through online stores. The rising number of offers or discounts through online retailing is attracting consumers and it increases consumer reach which evolved as a key source of revenue for many companies and farm owners. Online retailing offers high sales reach to businesses and high accessibility of products to customers. Companies are using their own websites to promote bison meat by giving lucrative offers to the consumers.

Offline Retailers: The offline retailers segment is segmented into supermarkets/hypermarkets, specialty stores, and others.

Supermarkets/Hypermarkets: Supermarkets & hypermarkets provide benefits such as availability of a variety of products, and personalized recommendations from staff. Supermarkets maintain a large variety of standard products and help customers in the selection of quality products such as brisket, chucks, and loin. Supermarkets provide essential food products to consumers under one roof, for instance, processed and frozen bison meat.

Specialty stores: A specialty store is a retail store that focuses on specific product categories. A specialty store sells a unique product such as variety of red meats. Specialty stores are known for their emphasis on quality, expertise, and customized services, and they provide a unique buying experience for customers.

Others: The others segment is divided into meat shops and convenience stores. A meat shop specializes in selling various types of meat and meat products to consumers. Meat shops offer a variety of cuts of beef, pork, lamb, poultry, bison meat, and seafood, as well as processed meat products. Meat shops offer a range of fresh bison meat, which is carefully sourced to ensure its quality and safety. Some meat shops offer value-added services, such as custom cutting and packaging, to meet the specific needs of their customers. A convenience store is a small retail shop that sells items of daily usage and essentials. Convenience stores offers instant product purchases.

United States Bison Meat Market Value (USD million), By Distribution Channel (2015-2030)

Distribution Channel	Online Retailers	Offline Retailers	Supermarket/ Hypermarket	Specialty Store	Others	Total
2015	80.1	219.9	*70.6*	*91.0*	*58.3*	**300.0**
2016	83.3	227.4	*73.3*	*94.2*	*60.0*	**310.7**
2017	86.8	235.6	*76.2*	*97.6*	*61.8*	**322.4**
2018	90.7	244.8	*79.4*	*101.5*	*63.9*	**335.6**
2019	95.1	255.0	*83.0*	*105.8*	*66.2*	**350.1**
2020	90.1	240.5	*78.6*	*99.8*	*62.1*	**330.6**
2021	92.7	245.8	*80.6*	*102.1*	*63.2*	**338.5**
2022	97.4	256.8	*84.5*	*106.7*	*65.6*	**354.1**
2023	102.8	269.6	*89.0*	*112.1*	*68.6*	**372.5**
2024	109.0	284.3	*94.2*	*118.2*	*71.9*	**393.4**
2025	116.1	301.0	*100.0*	*125.2*	*75.8*	**417.1**
2026	124.1	320.0	*106.7*	*133.2*	*80.1*	**444.1**
2027	133.0	341.1	*114.1*	*142.0*	*84.9*	**474.1**
2028	143.1	364.9	*122.5*	*152.0*	*90.4*	**508.1**
2029	154.4	391.3	*131.8*	*163.1*	*96.4*	**545.7**
2030	166.8	420.5	*142.1*	*175.3*	*103.0*	**587.3**
CAGR 2022-2030	**7.0%**	**6.4%**	***6.7%***	***6.4%***	***5.8%***	**6.5%**

Note: The grayed-out area of the table are the subcategories of offline retailers. The offline segment accounts for 72.6% of the market share and is projected to continue holding most of the market share. The specialty stores segment is projected to expand at a CAGR of 6.4% between 2022 and 2030.

Regional Analysis

West Region: The market in the West is projected to expand at 7.1% CAGR during the forecast period, as the western region of the US is home to many bison ranches and the bison ranching industry is rising in the region. Consumers supporting local and regional food producers is a growing trend in the western region of the US. Bison meat is produced by small-scale rancher and sold through local marketers. California is known for its diverse cuisine and bison meat is a popular ingredient in many different types of dishes, which is expected to fuel the market growth in the state.

Midwest Region: The market in Midwest is expected to expand at 6.8% of CAGR during the forecast period, owing to the rising marketing efforts to promote bison meat. These efforts include campaigns to educate consumers on the benefits of bison meat and to increase awareness of the availability of bison meat in the market. The Midwest has the strong food service industry, including restaurants, hotels, and catering businesses. Growing demand for the food service industry in Midwest is projected to fuel market growth in the region during the forecast period. Illinois has the thriving specialty food market, with consumers interested in unique and high-quality food such as bison meat. Growing demand for bison meat in Illinois is anticipated to propel market growth in the state in the coming years.

Northeast Region: The market in the Northeast is estimated to register 6.4% of CAGR during the forecast period, due to the increasing consumer interest in healthy and sustainable food alternatives and bison meat is a healthier option compared to other meat. Rising demand for locally sourced meat and food service in the Northeast region of the US is expected to boost the market growth during the forecast period. The increasing tourism & food industry in New Jersey, and highest meat consumption in Philadelphia are factors anticipated to boost bison meat demand in the state in the coming years.

Southwest Region: The market in the Southwest is expected to account for a market share of 15.4% during the forecast period, owing to the increasing growth of the bison ranching industry in the region. The Southwest is known for its local cuisine, and bison meat used in a variety of local dishes. Therefore, the demand for bison meat in restaurants is growing in the region. The market in Texas is anticipated to expand at a rapid pace, owing to the increasing number of local bison ranchers and people consuming bison meat.

Southeast Region: The market in the Southeast is anticipated to hold 14.0% share of the market during the forecast period, owing to the growing demand for grass-fed meats such as beef, pork, bison, and others. Bison meat is a healthier and more sustainable alternative to conventional meats. The Southeast is a popular tourist destination, and many visitors have interest in trying local & unique foods. Bison meat is becoming a more popular menu item in restaurants and other food services in the region to cater to these visitors. The number of health-conscious consumers is rising in Mississippi due to the growing prevalence of obesity and related health issues. Bison meat is lean and high in protein as well as low in fat. These factors are projected to propel the bison meat demand in the state during the forecast period.

United States Bison Meat Market Value (USD million), By Region (2015-2030)

Distribution Channel	West	Midwest	Northeast	Southeast	Southwest	Total
2015	69.6	82.2	57.3	42.9	48.0	**300.0**
2016	72.5	85.3	59.3	44.3	49.4	**310.7**
2017	75.6	88.7	61.4	45.8	50.9	**322.4**
2018	79.1	92.6	63.8	47.5	52.6	**335.6**
2019	83.0	96.8	66.5	49.3	54.5	**350.1**
2020	78.8	91.6	62.7	46.4	51.1	**330.6**
2021	81.1	94.0	64.1	47.3	52.0	**338.5**
2022	85.3	98.5	67.0	49.3	54.0	**354.1**
2023	90.2	103.8	70.3	51.7	56.4	**372.5**
2024	95.8	109.9	74.2	54.4	59.2	**393.4**
2025	102.1	116.8	78.6	57.4	62.3	**417.1**
2026	109.2	124.6	83.5	60.9	65.8	**444.1**
2027	117.2	133.3	89.0	64.8	69.8	**474.1**
2028	126.2	143.2	95.3	69.1	74.2	**508.1**
2029	136.3	154.1	102.2	74.0	79.2	**545.7**
2030	147.4	166.2	109.8	79.3	84.6	**587.3**
CAGR 2022-2030	**7.1%**	**6.8%**	**6.4%**	**6.1%**	**5.8%**	**6.5%**

Note: The Midwest segment held a 27.8% market share in 2021. This is projected to remain the case during the forecasted period. The western segment is expected to expand at a CAGR of 7.1% between 2022 and 2030.

Largest Domestic Bison Meat Producers

	Company Name	Location	Industry	Annual Revenue (Millions)	Annual Bison Meat Revenue (Millions)	Bison Meat Market Share
01	North American Bison, LLC	Fargo, North Dakota, US	Bison Meat	11.5	11.1-11.8	3.3%-4.0%
02	Great Range Bison	Henderson, Colorado, US	Bison Meat	6.5	6.2-6.9	1.5%-2.3%
03	High Plains Bison	Denver, Colorado, US	BISON PRODUCT	5.3	5.0-5.8	1.3%-2.0%
04	D'Artagnan	Union, New Jersey, US	Meat & Game, Bison Meat	53.4	3.2-3.7	1.0%-1.6%
05	Nebraska Bison	Adams, Nebraska, US	Bison Meat	5.0	2.7-3.0	0.6%-1.2%
06	Blackwing Meats	Antioch, Illinois, US	BISON (BUFFALO) MEAT	6.8	2.2.-2.9	0.5%-1.0%
07	Sayersbrook Bison Ranch	Hermann, Missouri, US	Bison Meat	5.4	1.2-1.6	0.2%-0.9%
08	DurhamRanch.com	Wyoming, US	Bison Meat	5.0	1.0-1.5	0.2%-0.8%
09	Northstar Bison	Cameron, Wisconsin, US	Bison Meat	2.6	Less Than 1	Less Than 0.1%
10	The Honest Bison	Segundo, California, US	Bison Meat	~1.0	Less Than 0.8	Less Than 0.1%

Note: Many of these producers maintain well established bison ranges with their own meat processing facilities. Some specialize strictly in Bison meat, while others work with various types of meat.

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