

MANITOBA ANALYTICS

Opportunities for the Manitoba Bison Industry



Background

The bison industry is relatively a small, but emerging, industry in both Manitoba and Canada. The number of bison in Manitoba has increased by over 200 per cent since the first bison census in 1996. Over the years, the bison industry has experienced strong pricing and high demand for its meat product. Because of its unique production system and product quality attributes, bison meat is a niche product. The industry is export-driven mainly to the US market. The current focus on sustainability and a healthy diet among a growing number of consumers is fueling the growth in the bison industry. Millennials and upper-income and more-educated consumers are driving the demand for bison meat.

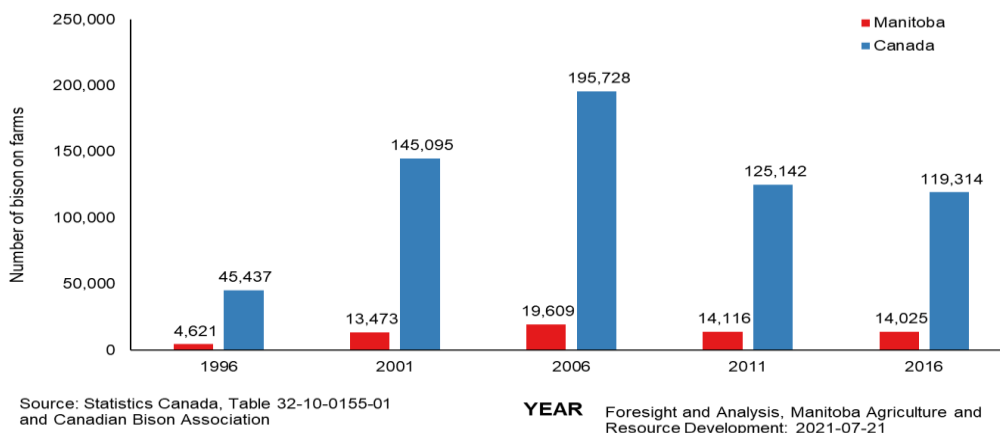
Bison were once the most dominant animals roaming the grassland of the North American Great Plains. Before 1868, the bison population was estimated to range between 30 and 70 million.¹ Although bison numbers dropped to a near extinction level, just over 1,000 by 1890, it has since recovered to reach nearly 400,000 today^{2,3}. Owing to increased public and private conservation efforts, the bison population is gradually coming back to its native habitat. The reintroduction of bison to the Great Plains is considered one of the most successful conservation efforts in North America.

The Manitoba government is working collaboratively with industries and academic institutions to position Manitoba as a leader in sustainable protein in North America. The bison industry is well-aligned with the Manitoba Protein Strategy and contributes to the province's vision of becoming North America's sustainable protein supplier of choice.

Bison Population in Canada

Manitoba reported 4,621 bison during the first census in 1996, 10.2 per cent of the national bison population. Between 1996 and 2016, the number of bison in Manitoba increased by 203.5 per cent or a compounded annual growth rate of 32.0 per cent. However, there was a slight decrease in the bison population during the 2016 census, compared to the previous census in 2011. In 2016, Manitoba had the third-largest bison number with 11.8 per cent of the bison population in Canada. Bison population, at the national level, followed a similar trend. Figure 1 below shows the number of bison on Manitoba and Canadian farms and ranches from 1996 to 2016.

Figure 1. Number of Bison on Manitoba and Canadian Farms and Ranches



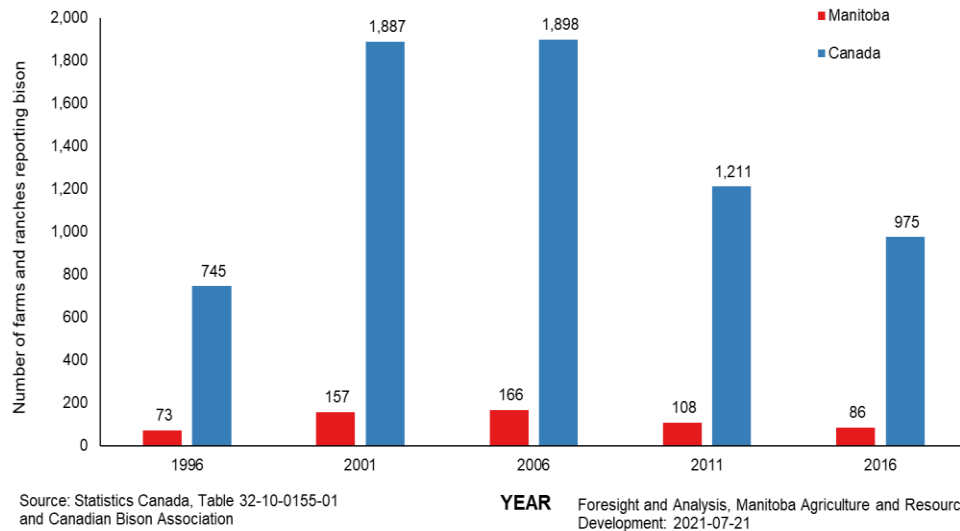
¹ <https://academic.oup.com/af/article/4/4/68/4638828>

² <https://the-pigeon.ca/2020/09/18/canadian-bison/>

³ <https://www.theguardian.com/environment/2018/dec/12/how-native-american-tribes-are-bringing-back-the-bison-from-brink-of-extinction>

The number of Manitoba farms and ranches reporting bison reached 166 in 2006, before dropping to 86 in 2016. Compared to 1996, the number of bison farms in Manitoba increased by 17.8 per cent. The average number of bison heads per farm in Manitoba increased by 158.7 per cent, from 63 heads in 1996 to 163 heads in 2016. At the national level, the average herd size increased by 100 per cent from 61 head in 1996 to 122 head in 2016.

Figure 2. Number of Farms and Ranches Reporting Bison

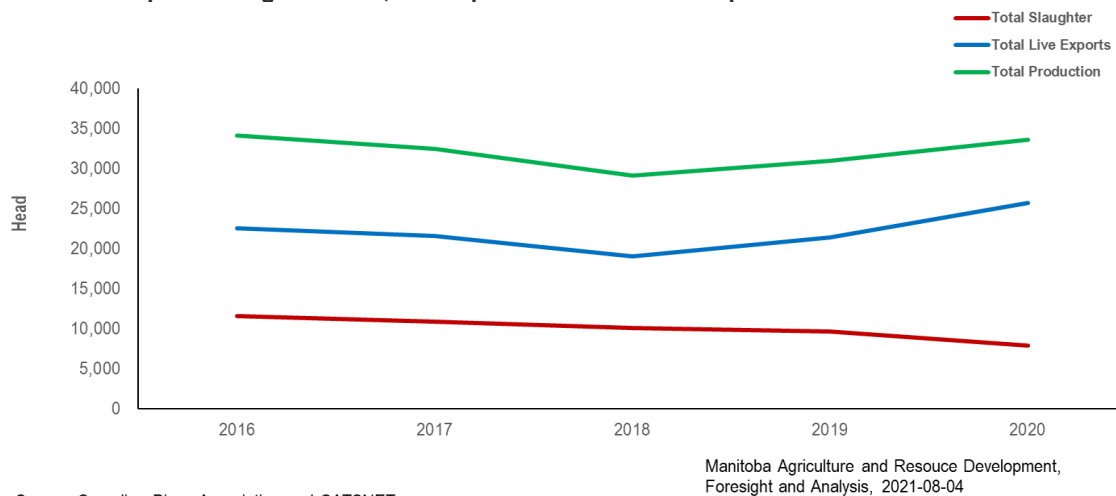


Canadian Production and Export

Over the last five years, the total annual bison production has slightly decreased by 0.4 per cent per year from 34,049 heads in 2016 to 33,580 heads in 2020. However, since 2018, annual bison production in Canada has increased mainly because of an increase in live bison exports to the US, while domestic processing is showing a gradual decrease since 2016.

Live bison exports to the US have shown an annual growth rate of 3.4 per cent over the past five years, where exports increased from 22,526 heads in 2016 to 25,721 heads in 2020. Live bison exports to the US increased by 20.4 per cent in 2020, compared to the previous year. Figure 3 (below) shows the trends in processing number, live exports and annual total bison production in Canada from 2016 to 2020.

Figure 3. Trends in bison processing numbers, live exports and annual total production in Canada from 2016 to 2020



Live bison accounts for the large majority of Manitoba's bison exports. In 2020, live bison accounted for 94.8 per cent of Manitoba's bison export. Manitoba's live bison exports nearly doubled in 2020, compared to the previous year because of the strong pricing in the US and appreciation of the US dollar value. Manitoba accounted for 14.4 per cent of Canada's total bison exports in 2020.

Table 1. Live Bison and Bison Meat Export (CAN \$) 2016-2020

	2016	2017	2018	2019	2020	% Change (2020/2019)
Canada						
Live bison	70,621,310	73,680,439	69,346,471	70,960,575	80,281,749	13.1
Bison Meat	13,444,578	12,255,055	17,983,114	15,387,974	5,035,045	-67.3
Total	84,065,888	85,935,494	87,329,585	86,348,549	85,316,794	-1.2
Manitoba						
Live bison	12,209,794	5,550,495	6,720,514	6,774,640	11,664,160	72.2
Bison Meat	136,553	957,358	85,362	1,492,976	645,134	-56.8
Total	12,346,347	6,507,853	6,805,876	8,267,616	12,309,294	48.9

Source: CATSNET

Export destinations

Bison export is highly concentrated on the US market. Over the last five years, Manitoba exported nearly 100 per cent of its live bison and bison meat to the US except for a very small amount of bison meat exported to Australia in 2020. At the national level, 100 per cent of live bison and 51.7 per cent of bison meat was exported to the US in 2020. Canada's bison meat export to the US was very stable over the last five years, except in 2020 where COVID-19 related disruption caused a large drop in bison meat export to the US.

Switzerland, Netherlands, Italy, and France were the main importers of Canadian bison meat in Europe in 2020. Bison meat exports to Nicaragua, Germany and the Netherlands showed the largest percentage increase between 2019 and 2020. Table 2 (below) shows the destinations of Canada's bison meat exports over the last five years.

Table 2. Canada's Bison Meat Export by Destination, 2016-2020

	2016	2017	2018	2019	2020	% Change (2020/2019)
US	9,895,244	9,072,803	10,264,354	9,397,494	2,605,484	-72
Switzerland	2,368,135	1,822,977	2,107,047	1,116,443	1,139,985	2
Netherlands	19,583	392,167	153,614	490,906	638,634	30
Italy	0	0	0	315,025	336,270	7
France	1,079,279	868,020	2,315,236	1,135,341	242,425	-79
Belgium	0	0	271,755	223,757	28,705	-87
Nicaragua	0	0	0	0	17,190	-
Mexico	16,964	98,462	618,644	509,498	15,795	-97
Germany	0	0	0	2,321	10,557	355
Albania	0	0	0	7,647	0	-
Hong Kong	18,198	0	0	0	0	-
Japan	0	0	695	321,908	0	-
Saint Pierre and Miquelon	0	44	483,285	400,057	0	-
Sint Maarten (Dutch part)	41,838	582	0	0	0	-
United Arab Emirates	5,337	0	0	38,127	0	-
United Kingdom	0	0	1,761,079	1,429,450	0	-
Western Sahara	0	0	7,405	0	0	-
Total	13,444,578	12,255,055	17,983,114	15,387,974	5,035,045	-67

Source: CATSNET

Impacts of COVID-19 on the Bison Industry

The bison industry is highly dependent on the demand from restaurants and other food services as they are the main buyers of high-value bison meats, particularly ribeyes, strips, and tenderloins⁴. While these cuts together account for only nine per cent of typical carcass weight, they account for 25 per cent of the total carcass value. Thus, losing these valuable customers due to the COVID-19-related disruptions was a big hit to the bison industry.

Canada and Manitoba's bison meat exports dropped by 67.3 per cent and 56.8 per cent in 2020, respectively. Canada's export to the US showed the largest drop where bison meat export decreased by 72.3 per cent in 2020, compared to the previous year. The European demand for bison meat also declined by 49.2 per cent in 2020, due to the impact of COVID-19 on food services and the substantial increase in freight rates. International reports showed the costs of shipping bison meat to Europe increased by three to four times the pre-COVID freight rates. Changes in demand resulted in a drop in production. The number of bison processed in Canada decreased by 18 per cent in 2020, compared to 2019, which has caused a build-up of market-ready bison on farms. However, the demand for meat, including bison meat, is expected to increase at grocery and retail stores, helping the industry to overcome some of the impacts of COVID-19. Prices for the Canadian live bison exports to the US remained strong. This, along with a favorable exchange rate supported live bison exports to the US, where the export of live bison increased by more than 20 per cent in 2020.

As countries lift COVID-19-related restrictions and food services re-open, the demand for bison meat will increase, thus helping the bison industry to thrive. The shift of marketing bison products from food services to retail may continue post-COVID, positively influencing both demand and prices.

Opportunities in the Bison Industry

The bison industry has shown sustained growth over the years and its products continue to gain popularity among consumers. The industry offers competitive economic opportunities for producers, processors and distributors. The COVID-19 pandemic has accelerated consumers' interest in eating nutritious, healthy and sustainable foods, making bison meat the perfect choice for these consumers. Some of the main factors contributing to this growing opportunity in the bison industry are highlighted below.

Capitalize on growing demand

Although the Canadian bison industry is small, it has experienced steady growth over the last several years, due to the high demand for its red meat and strong pricing. The bison industry is positioning its meat products in the premium red meat segment, both in domestic and international markets. Bison meat is the fastest-growing red meat segment in the US.⁵ Millennials and upper income and more-educated consumers are driving the demand for bison meat⁶. Bison meat is also becoming popular among upscale restaurant chefs.

Leverage recognition of bison as sustainable meat

In recent years, the livestock industry has endured pressure from different groups where environmental and health considerations are the main sources of concern. Increased environmental awareness and consumer interest in health-promoting and naturally-produced products are creating market opportunities for the bison industry. Bison meat fulfills several sustainability characteristics that appeal to consumers, such as its health benefits, heritage, and land regenerative benefits. Compared with beef, bison meat has shown higher nutritional value (high proportion of protein and excellent sources of vitamins) and better palatability traits (generally more tender and juicy).⁷ Bison meat has lower fat than other red meats, which makes it more appealing to consumers concerned with the health impacts of consuming meats with high-fat content. Bison requires low external inputs, less management, and are raised without growth stimulants or antibiotics added to their feed. While bison leaves a minimal footprint on the environment, they are also considered a keystone species for the role they play in the restoration and maintenance of the Great Plains biodiversity.

Offer Diversification Opportunity for Livestock Producers

⁴ <https://bisoncentral.com/wp-content/uploads/2020/04/Bison-COVID-Impact-4-2020.pdf>

⁵ https://digital.bnpmmedia.com/publication/?i=517369&article_id=3158140&view=articleBrowser&ver=html5

⁶ https://digital.bnpmmedia.com/publication/?i=517369&article_id=3158140&view=articleBrowser&ver=html5

⁷ <https://www.canadianbison.ca/producers/about-bison/present-tren>

The world is witnessing frequent and extreme weather conditions due to climate change, and North America is no different. Thus, building a resilient livestock industry is more important than ever before. As a native species of the North American plains, bison are well-adapted to the local weather conditions and naturally available feeds. Bison are more efficient than cattle in utilizing low-quality feeds. They have a unique rumination process that helps them digest food more than once to absorb as many nutrients as possible, thus reducing the need for consistently searching for grazing land⁸. Furthermore, as the bison's bodies adapt to the cycle of the seasons, their metabolism naturally decreases in the winter, helping them to eat less. Overall, bison perform better than any other domesticated livestock under drought and harsh winter conditions. Because of their unmatched hardiness to extreme weather conditions,⁹ bison offer a unique diversification opportunity for the Manitoba and Canadian livestock industry.

Capitalize on Trade Advantages

The European Union (EU) has been the primary destination for Canadian high-end bison primal cuts. Under the Canada-EU Comprehensive Economic and Trade Agreement (CETA), Canada has a tariff-free export quota of up to 3,000 tonnes of bison meat to the European Union. In 2020, Canada exported about 10 per cent of the allowable tariff-free quota to Europe. Thus, there is a big opportunity to increase tariff-free bison meat exports to the EU. Canada's free trade agreement with Chile, one of the main bison meat importers, offers another export opportunity for the bison industry.

Support Economic Opportunities for Indigenous Communities

For centuries, Indigenous communities lived in harmony with the nature around them and depended on it for their food, clothing, shelters, medicine, and spiritual and cultural practices. The reintroduction of bison to the Great Plains is considered very important for the revival of Indigenous culture and culturally-appropriate Indigenous food systems^{10,11}. Bison reintroduction is also considered to have significant importance for the reconciliation process in Canada.¹² Thus, supporting Indigenous producers to initiate or expand a culturally-appropriate and sustainable bison operation would bring more economic opportunities to Indigenous communities.

Potential to Increase Local Processing Capacity

Currently, there is limited local bison meat processing capacity in Manitoba. True North Foods is the only federally licensed plant in Manitoba that can process bison meat for export markets. However, True North Foods only custom-culls bison and does not market bison meat. As the demand for bison meat increases and bison farms expand, there could be an opportunity to establish a dedicated bison processing plant in Manitoba.

Contact us

- Go to manitoba.ca/agriculture and click on Markets and Statistics
- Email us at industryintelligence@gov.mb.ca
- Follow us on Twitter @MBGovAg

⁸ <https://the-pigeon.ca/2020/09/18/canadian-bison/>

⁹ <https://the-pigeon.ca/2020/09/18/canadian-bison/>

¹⁰ <https://niche-canada.org/2021/02/18/bison-reintroduction-as-reconciliation-in-saskatchewan/>

¹¹ <https://www.theglobeandmail.com/opinion/article-reintroducing-bison-to-indigenous-land-is-a-small-act-of/>

¹² <https://niche-canada.org/2021/02/18/bison-reintroduction-as-reconciliation-in-saskatchewan/>