

OATS SECTOR

OVERVIEW OF THE OAT SECTOR IN MANITOBA



- Manitoba producers have a long tradition of growing and producing top quality oats and processed oat products.
- The Red River Valley has some of the highest concentrations of high milling quality oats grown per square kilometre in all of North America.

- In 2011, Manitoba reported 3,930 oat farms compared to 5,798 in 2006. This represents 13.6% of oat farms in Canada. Annually, Manitoba produces approximately 18 to 19% of Canada's total oat production.

Oats	Manitoba	Manitoba	Canada	Canada
	2011	2006	2011	2006
Number of farms	3,930	5,798	28,994	41,577
Acres	695,945	945,847	3,761,367	5,099,298
Hectares	281,639	382,771	1,522,171	2,063,612

Source: Census of Agriculture 2011

- Over the years, trends which influenced the importance of oats included: size and makeup of the livestock industry, value of pulse and oilseed crops, and increased use of oats in the human food market.
- Manitoba's early settlers, who used horses as the main source of power for farming and transportation, considered oats as an important feed crop. Oat production in the province peaked in 1921 with over 2 million harvested acres and reached record lows in 1991 with less than 110,000 harvested acres as corn and barley became more popular sources of animal feed.
- A slight upward trend in oat production in the past two decades can be attributed to its benefits for human health and to increased demand from the recreation horse feed market.

More recently, oats have trended as a low volume coarse grain due to cropping options that favour higher value grains and oilseeds, low loan rates and flat consumption patterns.

Processing Oats

- Manitoba has two major facilities that process oats as well as several smaller facilities. Can-Oat Milling Products, in Portage la Prairie and Manitoba's largest oat processor, processes oats into various products for human consumption including flour, groats, rolled oats and oat bran, and produces oats for animal feed rations.
- Emerson Milling, located in Emerson near the Canadian/American border, processes oats for use in animal feed, including domestic pets, birds and horses.
- Cultivar development focuses on food and feed quality traits such as plumpness, test weight, colour, milling yield, hull content, protein, oil and beta-glucan content, for human functional foods and niche markets for hog and cattle feeds.
- The health benefits from oats and oat products have been well documented since the late 1980s although human consumption demand has slowed. Oats contain high amounts of dietary fibre, beta-glucan, proteins, unsaturated fatty acids, vitamins, minerals and antioxidants.
- Oats contain more soluble fibre than any other grain, resulting in slower digestion and an extended sensation of fullness. One type of soluble fibre, beta-glucans, has proven to help lower cholesterol.
- In 2010, PepsiCo's Quaker Oats division developed a method of modifying oats using enzymes to derive a potent natural sweetener with potential market demand from food manufacturers seeking a replacement for sucrose. The development of 100% oat flour bread targets people suffering from celiac disease.
- Oat kernels are milled to produce various products, such as oat groats, thick oats and steel-cut oats. Milling also affects the nutty, robust flavour of oats. Oat groats are oat kernels with the hulls removed; these can be used to make a breakfast porridge but they take a long time to cook.
- Oat groats can be heat treated and milled into several types of rolled oats. Thick oats are oat groats that are steamed, rolled, and flaked; cooking time for thick oats can be shortened by soaking them overnight. When oat groats are chopped on a steel mill, the result is steel-cut oats, which are chewy and often used for oatmeal and muesli. Quick oats are steel cut oat groats, flaked to .014 to .018 inches thick; although some of the nutty flavor and texture is lost in this process, they require minimal cooking and are most often used in baking.
- Oats are also commonly used as feed for horses when extra carbohydrates, and the subsequent boost in energy, are required. The oat hull must be crushed ("rolled" or "crimped") for the horse to digest the grain, and may be given alone or as part of a blended food pellet. Cattle are also fed oats, either whole, or ground into a coarse flour using a roller mill, burr mill, or hammer mill.
- Oat straw can be used by cattle and horse producers as bedding, due to its soft, relatively dust-free, and absorbent nature.

Trade

- Manitoba exports both unprocessed oats and processed oat products. Over the last few years, the level of unprocessed oats exported has been declining, while processed oats products being exported is on the rise.
- Manitoba's unprocessed oats have long been a popular choice for racehorse feed and more recently for milling and cereal products in the United States; processed oats exported around the world products include oat bran, rolled oats and oat flour.
- While the bulk of Manitoba oats and processed oat products are destined for the United States, other destinations include Japan and several countries in the Far East, Colombia, Chile and several other nations in Latin and South America.
- Oat production has remained steady for the past 10 years and world trade in oats has remained virtually unchanged for the past 2 years.
- The US is the world's largest importer of oats, on average accounting for 83% of world oat exports. It is also the world's 4th largest oat producer, generally using about 1/3 of its total yearly oat supply for food/industrial use and about 2/3 for feed.
- Mexico is the world's 2nd largest oat importer at 4%, followed by Japan which accounts for 3% of world oat imports.
- Canada, the EU and Australia on average account for 83%, 6% and 6%, respectively, of world oat exports.
- Canada is the world's largest exporter of oats - on average it accounts for 83% of global oat exports. 92-99% of Canada's oats and oat product are exported to 4 major commercial markets in the US, including:
 - 1) milling and industrial demand for oats with stringent purity good groat yield,
 - 2) performance feed demand from the southern US horse market for high quality white oats; although there is competition from corn in pelleted complete rations,
 - 3) general feed market for beef cattle and horses; this market is highly competitive and price-responsive with a high degree of substitutability,
 - 4) specialty demand from organic, birdseed, and health food markets.
- The EU is the world's largest oat producing region, on average producing about 1/3 of the world's oats. Finland and Sweden are the main oat producers while Poland and Germany are minor producers. Nearly all of the EU's oat production is used internally and only about 6% is exported.
- Oat production in Australia, concentrated mainly in New South Wales and Western Australia, averages about 6% of total world oat exports, mainly high quality oats for human consumption. Because of location, Australian oats generally are utilized by the Asian markets, mainly India, Japan and Korea.

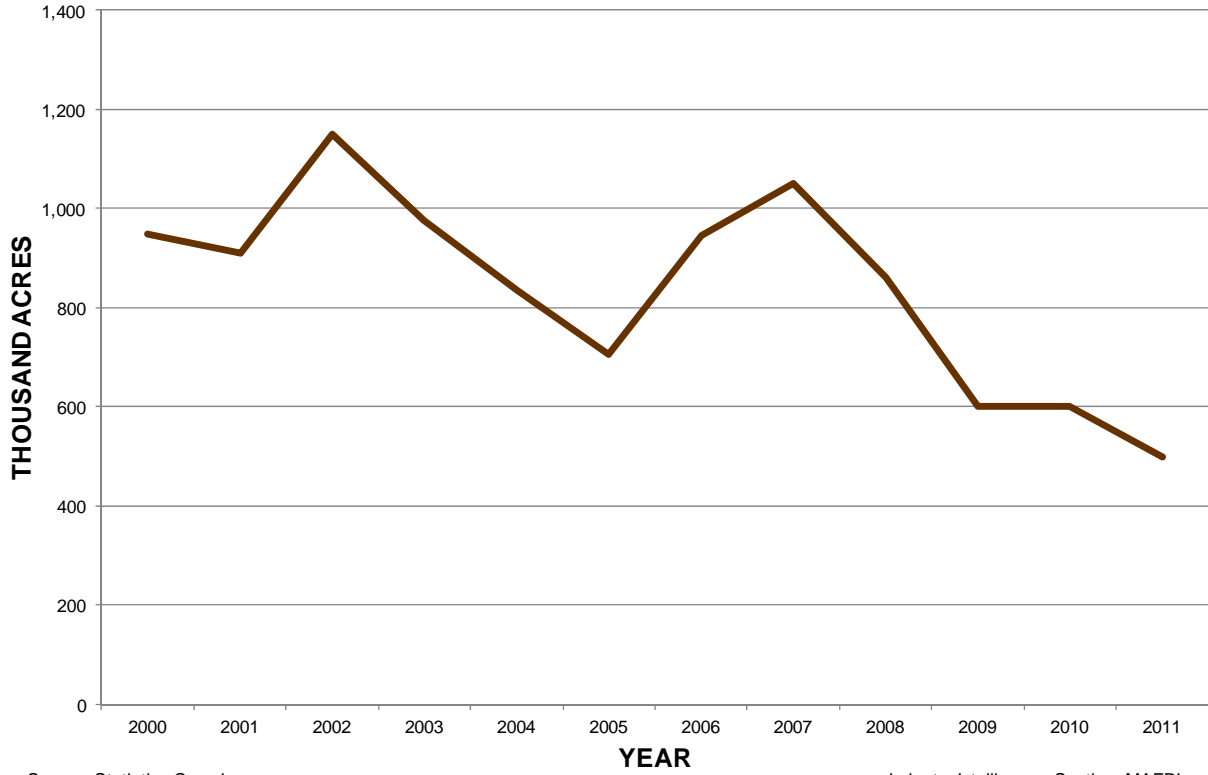
Oats Outlook for Canada 2012-2013

- For 2012-13, seeded area is intended to rise by 9% due to the recovery in seeded area on the prairies.
- Production is forecast to rise by 5% but total supply is forecast to decrease by 3% due to very low carry-in stocks.
- Total domestic use is forecast to increase by 3%.
- Exports are forecast to decrease by 9% due to the tighter Canadian supply and a 9% decrease in import demand in the US related to a 15% increase in expected seeded area in the US. The US oat crop was seeded early and is in good shape and US production is forecast to increase by about 40%.
- Carry-out stocks are forecast to increase by 10% but remain at very tight levels.
- The price of oats is largely dictated by the price of US corn and has fallen with the expectation for a record large US corn crop in 2012. In the last half of May, the Chicago oat futures price fell by over 20% due to lower corn prices. The new crop oat harvest will pressure prices. The USDA forecasts the US farm price of oats to decrease to US\$2.70/bu for 2012-13 from US\$3.45/bu in 2011-12. A similar price decline is forecast for Canada.
- The International Grains Council (IGC) is forecasting a 2% decrease in world oat production. Surprisingly, the US, the world's largest oat importer, along with Canada, may be the only major oat producer that will see a production increase for 2012-13. World total supply and usage is forecast to decrease slightly which will create only a nominal decrease in carry-out stocks.

Outlook for Oats	2010-2011	2011-2012p	2012-2013f
Area Seeded (kha)	1,179	1,258	1,373
Area Harvested (kha)	906	1,030	1,100
Yield (t/ha)	2.74	2.91	2.86
Production (kt)	2,480	2,997	3,150
Imports (kt)	25	20	20
Total Supply (kt)	3,674	3,786	3,670
Exports (kt)	1,935	2,300	2,100
Food & Industrial Use (kt)	47	55	58
Feed, Waste & Dockage (kt)	817	821	851
Total Domestic Use (kt)	970	986	1,020
Carry-out Stocks (kt)	769	500	550
Average Price (\$/t)	244	205 to 235	160 to 190

Source: Statistics Canada and Agriculture and Agri-Food Canada, June 2012

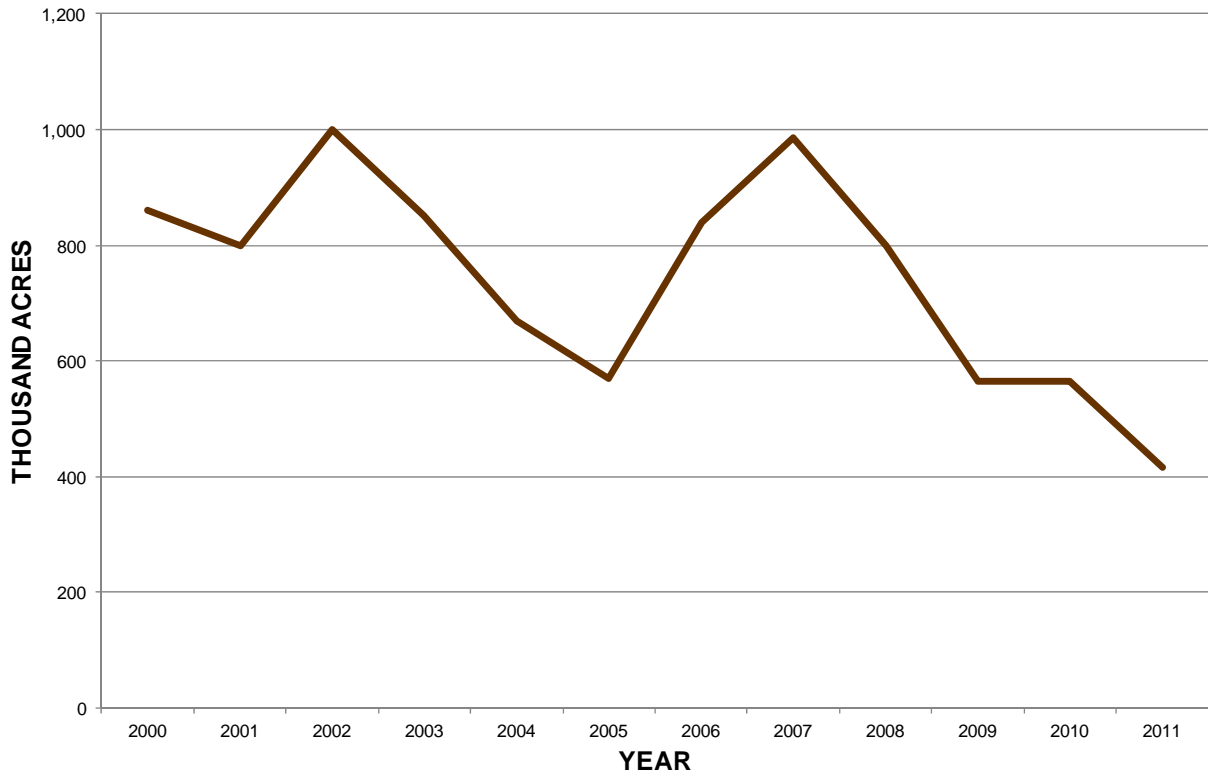
Oats - Seeded Acres in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

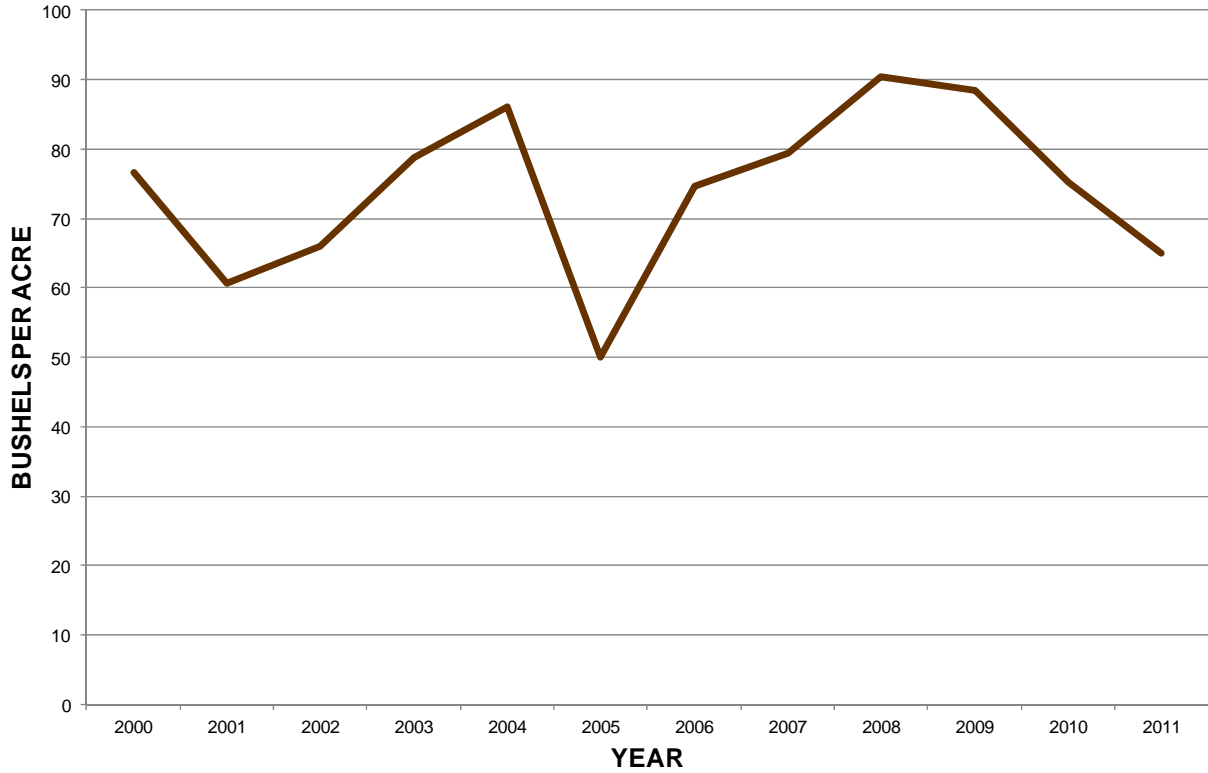
Oats - Harvested Acres in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

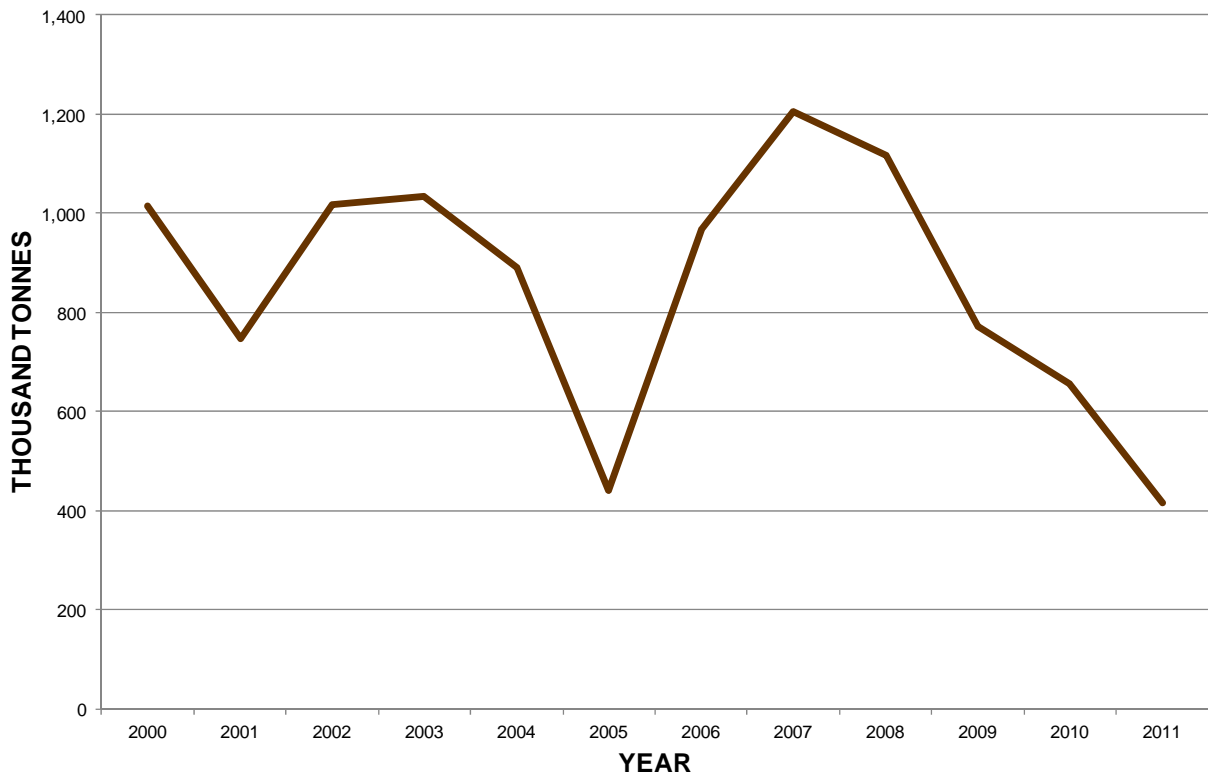
Oats - Yield per Acre in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

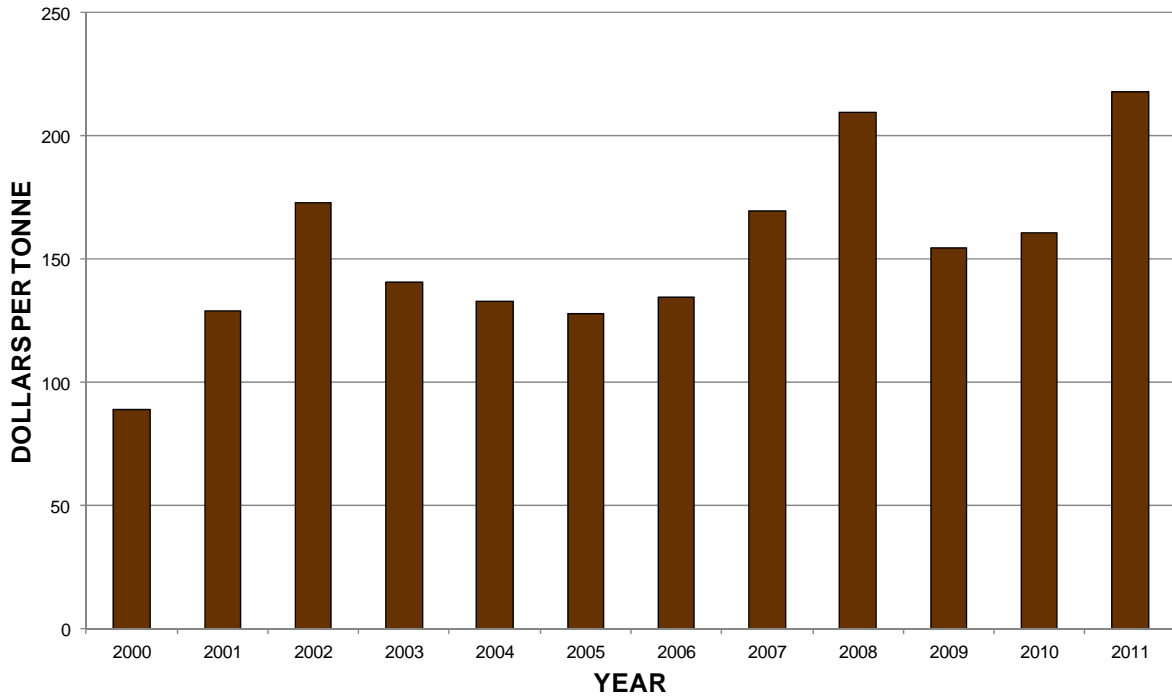
Oats - Tonnes Produced in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

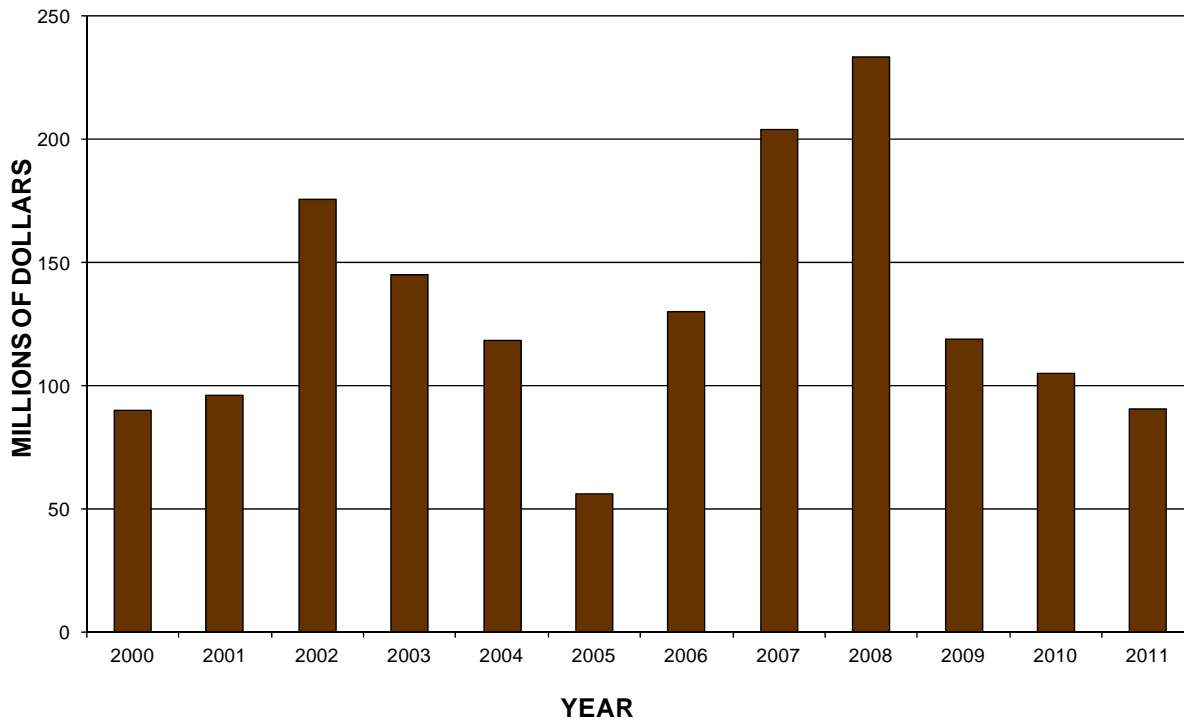
Oat Prices in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section,

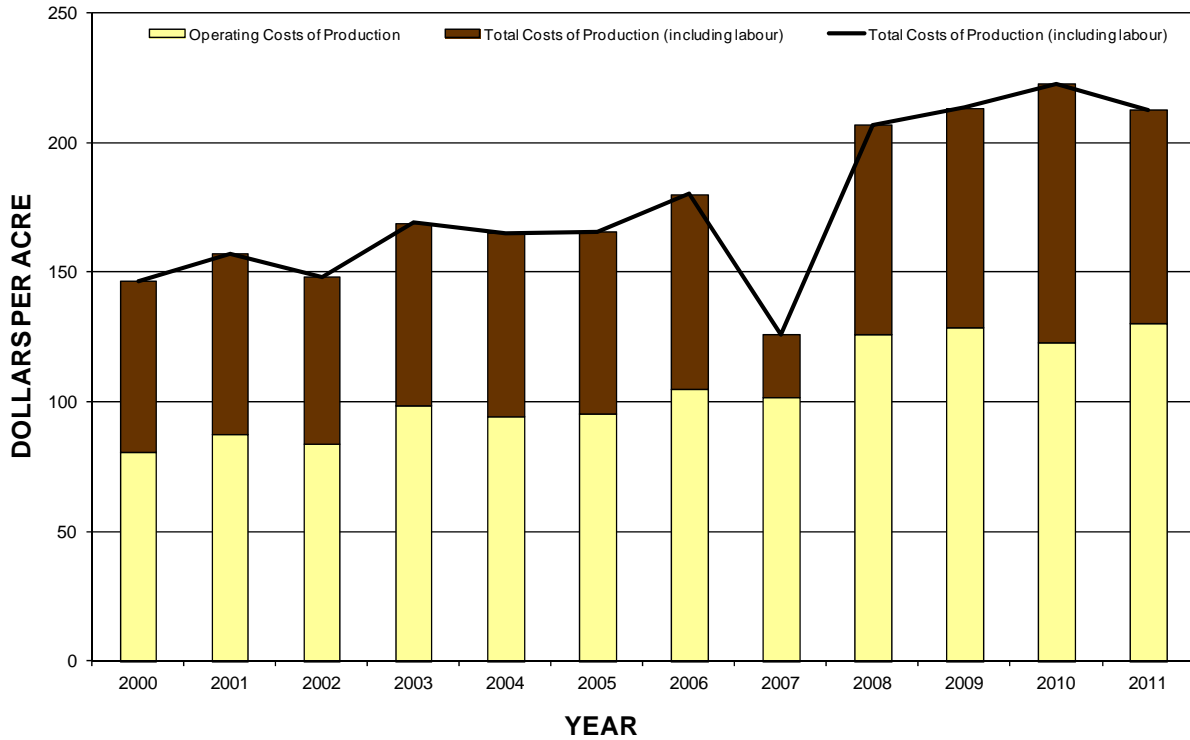
Value of Oat Production in Manitoba 2000 - 2011



Source: STC, AAFC, MAFRI

Industry Intelligence Section, MAFRI

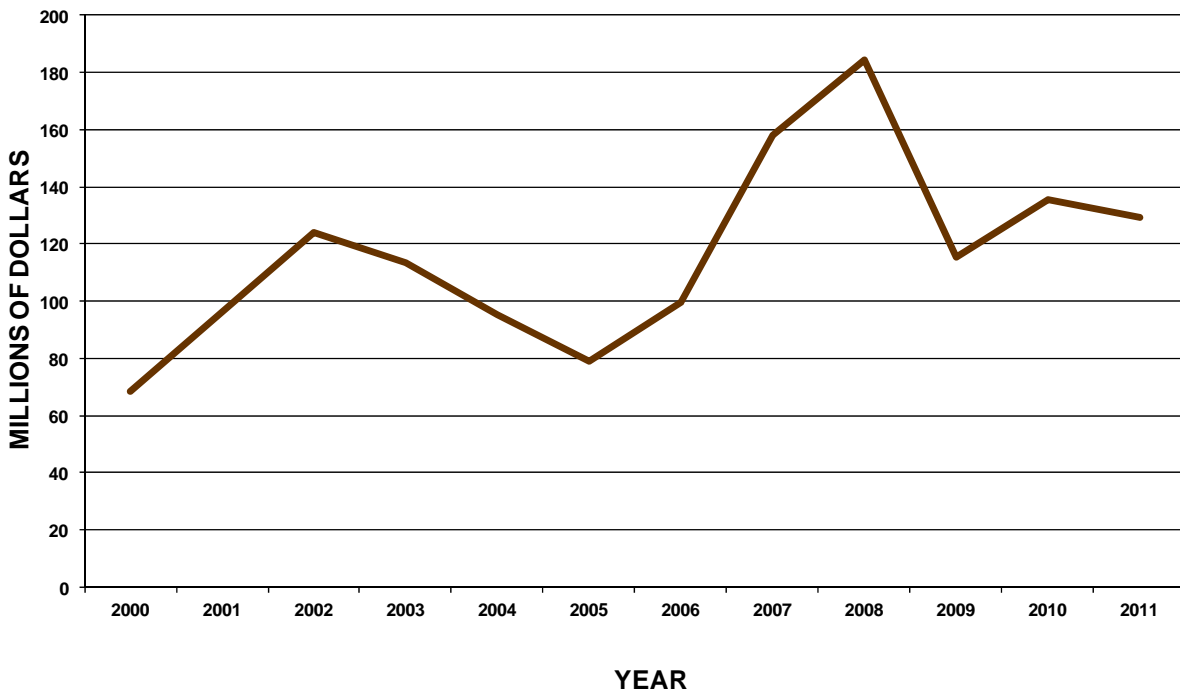
Cost of Oat Production in Manitoba 2000 – 2011



Source: MAFRI

Industry Intelligence Section, MAFRI

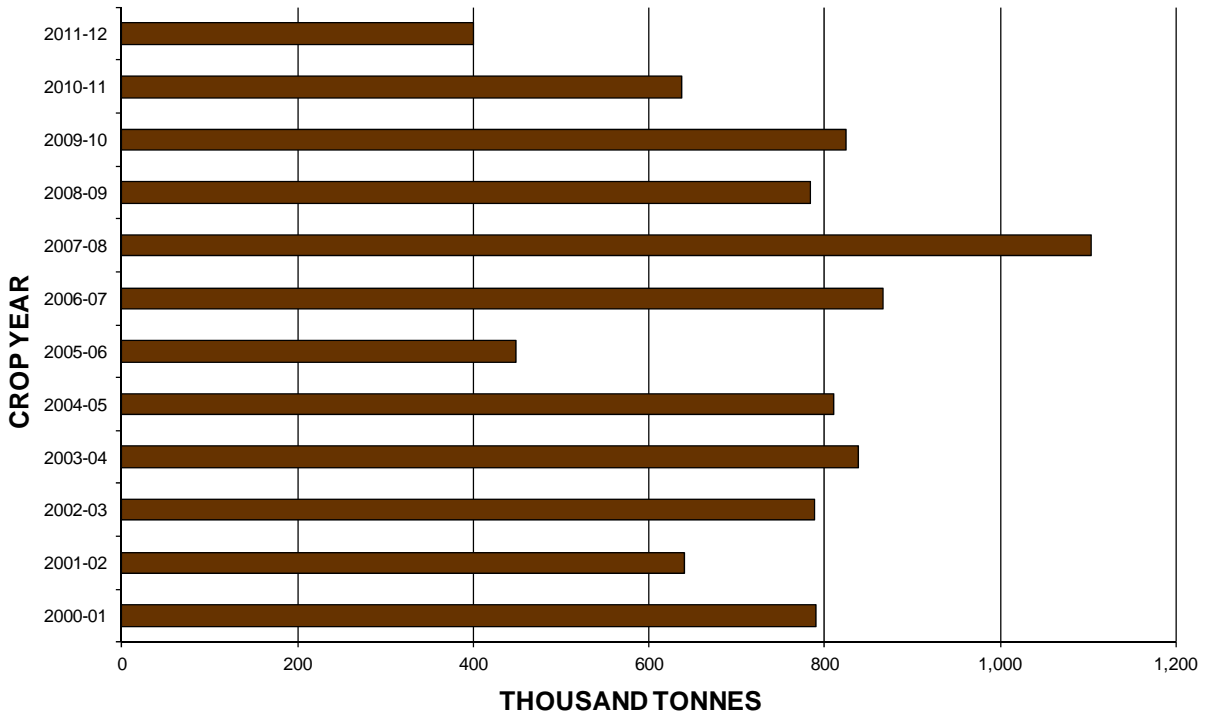
Farm Cash Receipts for Oats in Manitoba 2000 – 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

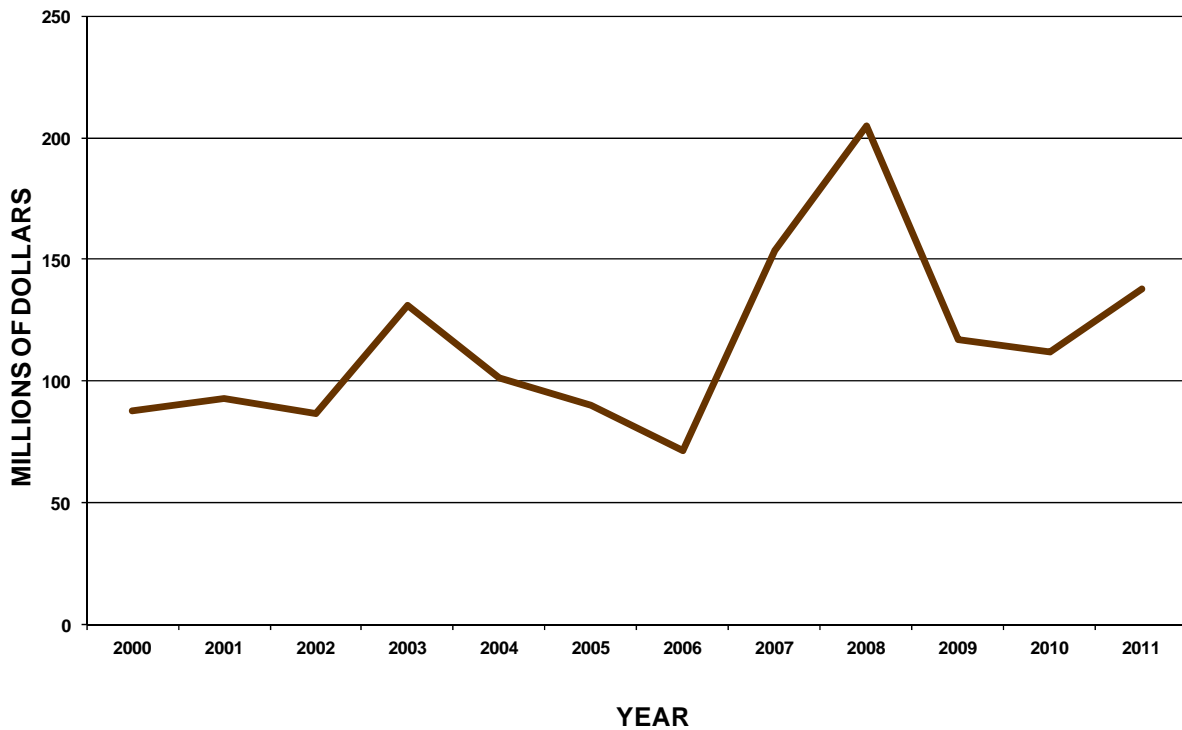
Marketings of Manitoba Oats 2000 - 2011



Source: STC, AAFC, MAFRI

Industry Intelligence Section, MAFRI

Manitoba Oats Exports 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

Farm Supply and Disposition of Manitoba Oat Crop, 2000/01 to 2011/12

<i>000 tonnes</i>	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Opening Stocks Aug1	120	75	55	100	250	160	130
Production	441	967	1,205	1,117	771	655	416
Total Supply	561	1,042	1,260	1,217	1,021	815	546
Marketings	448	867	1,104	784	824	637	400
Seed	27	30	25	17	17	14	15
Carry-over	75	55	101	250	160	129	100
Feed/ Waste/ Dockge	11	90	30	166	20	35	31
Total Disposition	561	1,042	1,260	1,217	1,021	815	546

<i>000 bushels</i>	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Opening Stocks Aug1	16,076	11,946	7,808	5,741	10,564	11,483	3,674
Production	27,700	47,551	54,900	51,501	44,001	22,400	12,002
Total Supply	43,776	59,498	62,708	57,243	54,565	33,883	15,676
Marketings	17,001	25,026	35,571	18,980	20,319	17,349	6,890
Seed	1,149	1,400	1,118	960	658	439	219
Carry-over	11,946	7,808	5,741	10,564	11,482	3,674	3,674
Feed/ Waste/ Dockge	13,679	25,264	20,278	26,738	22,105	12,420	4,893
Total Disposition	43,776	59,498	62,708	57,243	54,565	33,883	15,676

- OATS - Common Conversions**

1 metric tonne oats = 64.841 bushels.

There are 34 pounds in 1 bushel of oats.

Production and Value of Manitoba Oats

Year	Seeded Area (hectares)	Harvested Area (hectares)	Average Yield (kg per ha)	Production (tonnes)	Price per Tonne (\$/tonne)	Total Value (\$000)
1990	186,200	145,700	2,300	339,300	67	22,733
1991	155,399	109,300	2,000	222,100	84	18,656
1992	230,700	194,200	2,900	555,200	98	54,410
1993	242,800	202,300	2,400	493,500	97	47,870
1994	303,500	263,000	2,500	663,200	98	64,994
1995	303,500	263,000	2,400	624,600	146	91,192
1996	424,900	388,500	2,700	1,056,400	137	144,727
1997	323,700	283,300	2,600	735,600	125	91,950
1998	404,700	364,200	2,800	1,030,200	111	114,352
1999	327,800	295,400	2,900	854,400	91	77,750
2000	384,500	348,000	2,900	1,016,300	89	90,197
2001	368,300	323,700	2,300	748,000	129	96,312
2002	465,400	404,700	2,500	1,017,900	173	175,628
2003	394,600	344,000	3,000	1,033,300	140	145,086
2004	337,900	271,100	3,300	889,900	133	118,294
2005	285,300	230,700	1,900	440,700	128	56,348
2006	382,800	339,900	2,800	967,400	135	130,280
2007	424,900	398,600	3,000	1,204,500	170	204,235
2008	348,000	323,700	3,400	1,116,600	209	233,794
2009	242,800	228,600	3,400	771,100	154	119,096
2010	242,800	228,600	2,900	655,400	161	105,342
2011	202,300	167,900	2,500	416,400	218	90,642

Year	Seeded Area (acres)	Harvested Area (acres)	Average Yield (bu per acre)	Production (000 bushels)	Price per Bushel (\$/bushel)	Total Value (\$000)
1990	460,000	360,000	61.1	22,000	1.03	22,733
1991	383,999	270,000	53.3	14,400	1.30	18,656
1992	570,000	480,000	75.0	36,000	1.51	54,410
1993	600,000	500,000	64.0	32,000	1.50	47,870
1994	750,000	650,000	66.2	43,000	1.51	64,994
1995	750,000	650,000	62.3	40,500	2.25	91,192
1996	1,050,000	960,000	71.4	68,500	2.11	144,727
1997	800,000	700,000	68.1	47,700	1.93	91,950
1998	1,000,000	900,000	74.2	66,800	1.71	114,352
1999	810,000	730,000	75.9	55,400	1.40	77,750
2000	950,000	860,000	76.6	65,900	1.37	90,197
2001	910,000	800,000	60.6	48,500	1.99	96,312
2002	1,150,000	1,000,000	66.0	66,000	2.66	175,628
2003	975,000	850,000	78.8	67,000	2.17	145,086
2004	835,000	670,000	86.1	57,700	2.05	118,294
2005	705,000	570,000	50.1	28,575	1.97	56,348
2006	945,847	840,000	74.7	62,730	2.08	130,280
2007	1,050,000	985,000	79.3	78,100	2.62	204,235
2008	860,000	800,000	90.5	72,400	3.23	233,794
2009	600,000	565,000	88.5	50,000	2.38	119,096
2010	600,000	565,000	75.2	42,500	2.48	105,342
2011	500,000	415,000	65.1	27,000	3.36	90,642

Source: Statistics Canada; Agriculture and Agri-Food Canada; Manitoba Agriculture, Food and Rural Initiatives.

