

OATS: SITUATION AND OUTLOOK

August 3, 2010

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OATS: SITUATION AND OUTLOOK

Canada is the world's largest oat exporter and is expected to account for 45-50% of world oat exports in 2009-2010. Canada is the world's third largest producer of oats next to the European Union (EU) and Russia. Oats represents about 6% of the production and exports of grains and oilseeds in Canada. The value of Canadian exports for oats and oat products decreased to \$482 million in 2009 from \$648 million in 2008. For 2009-2010, the production of oats in Canada decreased by about 35% from 2008-2009. About 95% of Canadian oat exports are to the United States (US) market. The role of the EU in the oat export market has decreased significantly over the last 5 years. The average price of oats decreased from 2008-2009 by 11%, price increases are forecast for 2010-2011 based on estimated drop in Canadian oat production and an increase in coarse grains prices in general. This issue of the Market Outlook Report examines the situation and outlook for oats.

OVERVIEW OF OATS

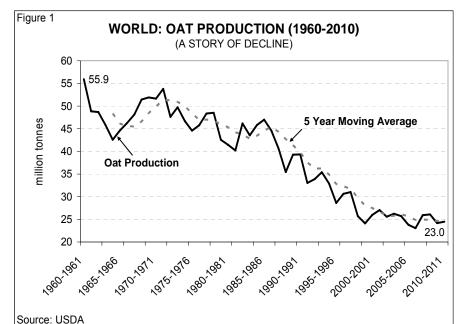
The health benefits from oats and oat products have been well documented and began with the start of the "oats craze" in the late 1980s. Oats contain high amounts of valuable nutrients such as dietary fibre, β -glucan, proteins, unsaturated fatty acids, vitamins, minerals and antioxidants.

However, in recent years human consumption demand has slowed and increased future demand for oats will likely come through innovation. In the spring of 2010, PepsiCo's Quaker Oats division had developed a method of modifying oats using

enzymes in order to derive a potent natural sweetener, as the use of corn based sucrose sugar has come under increasing scrutiny because of its link to obesity. This is a potential market as a wide range of food product manufactures are actively looking for sucrose replacements. The development of 100% oat flour bread is also underway and recent studies have shown that oats can be tolerated by most people suffering from celiac disease.

Raw oats has lost favour as an animal feed source, being replaced by corn and barley. In the past two decades oat benefits for human health have been

> widely documented and the demand for milled oats and oat products has increased.



GLOBAL PRODUCTION

Since 2005-2006, the world production of oats has averaged around 24.6 million tonnes (Mt). The production of oats worldwide has been very stable and long term forecasts show it to remain at these levels with little growth. Cropping patterns will favour higher value grains and oilseeds.

The EU is the world's largest oat producing region followed by Russia, Canada, US and Australia. Global oat imports continue to be dominated by the US followed by Germany, Mexico and Japan. The US alone accounts for about 80% of all world oat imports. Canada remains the world's largest exporter with the US as its largest export destination.

On average the US accounts for 92-99% of Canada's oats and oat product exports. The EU (mainly Finland and Sweden) and Australia are the next largest export regions.

Although Russia is the world's largest single oat producer, it consumes its oats domestically and does not generally enter the export market. Most production in Russia is feed quality oats.

Historically oats has been a much more important crop. Since 1960 (Figure 1), oat production has decreased from 56 Mt to just 23 Mt in 2010, a decline of about 60%. Oats is the only major world crop that has shown a decline in production over this period. Although for the past 10 years oat production has been relatively stable averaging 25.4 Mt per year and may suggest that oats has found a residual demand level.

SITUATION FOR 2009-2010

In 2009-2010, the US produced its all-time record corn crop and forecasts for 2010-2011 are for its second largest corn crop ever. The large corn production has depressed prices over the entire global coarse grain complex. The price for oats has decreased given corn's substitutability to oats in livestock feed rations.

Table 1

WORLD: OAT SUPPLY AND DISPOSITION						
local marketing year	2008 -2009	2009 -2010	2010 -2011f			
	million tonnes					
Carry-in Stocks	3.35	4.98	4.30			
Production	26.14	24.16	23.02			
Total Supply	29.49	29.14	27.32			
Total Use	24.51	24.85	24.02			
Carry-out Stocks	4.98	4.30	3.01			
Trade	2.14	2.04	2.34			
Source: USDA f: forecast, USDA						

The US prices for corn and oats are an indicator for global prices. In their July 2010 release, the forecast from the United States Department of Agriculture (USDA) for the average farm gate prices that US producers will receive in the 2009-2010 crop year are: corn at US\$3.55/bu or US\$139.76/tonne and oats at US\$2.02/bushel or US\$139.16/tonne.

Oat trade, like production, has been very steady for the past 10 years and is not expected to change significantly. World trade in oats for the past 2 years has remained virtually unchanged. The US, Mexico and Japan on average account for 81%, 4% and 3%, respectively, of world oat imports. Canada, the EU and Australia on average account for 83%, 6% and 6%, respectively, of world oat exports.

UNITED STATES: OAT UTILIZATION

The four major commercial US markets for oats are:

- 1. **Milling/Industrial market**, which requires oats that meet stringent purity requirements; have good groat yield, uniformity and colour (not stained). Grades normally desired are No. 1 and 2 Canadian Western (CW) Oats.
- 2. **Performance feed market**, mainly the southern US horse market, demands the highest quality white oats. In recent years oats is being displaced by corn in pelleted complete ration form.
- 3. **General feed market**, mainly for beef cattle and horses is small relative to the market for barley and corn. This market is highly competitive with other feed grains, especially corn, since the market is quite price-responsive with a high degree of substitutability. The lowest value oats are generally sold in this market.
- 4. **Specialty market**, for oats does exist, which includes organic, birdseed, and health food markets. In recent years a market for hulless oats (bred so the hulls fall away from the groat at harvest) has emerged due to the excellent food and feed value, but these oat varieties are usually grown under contract.

OUTLOOK FOR 2010-2011

The USDA forecast and adjusted by AAFC's forecast, projects a 5% decrease in world oat production (Table 1) from 24.16 Mt in 2009-2010 to 23.02 Mt for 2010-2011. This is due to lower forecasted production in Canada and to a lesser extent, the EU. The current estimate for a decrease in Canada oat production is based on very wet conditions during the seeding period.

World initial oat trade forecasts for 2010-2011 indicate an increase of about 15 percent. For 2009-2010 oat trade is estimated to be 2.04 Mt and forecast to be 2.34 Mt for 2010-2011. AAFC has forecast 1.8 Mt of Canadian oat exports for 2010-2011 but this forecast could change based on final Canadian production.

MAJOR IMPORTERS

United States

The US is the world's largest importer of oats and the fourth largest oat producer. Generally, the US uses about one-third of their total yearly oat supply for food and industrial use and about two-thirds for feed. Over the past 5 calendar years Canada's exports to the US have averaged 1.7 Mt of oats and 0.14 Mt of milled oat products. For 2010-2011 the USDA is forecasting US oat imports of 1.6 Mt.

The majority of the oats exported to the US are high quality for the food market. The US also imports from the Scandinavian countries of Finland and Sweden. These Scandinavian oats generally enter through the US Gulf and mainly service the south-eastern US market.

For 2010-2011, area seeded to oats in the US is estimated to fall to the second lowest seeded acreage on record at 3.2 million acres. Poor net returns per acre, relatively low government support payments and the increasing substitution of corn for oats in pelleted horse rations has US producers switching to alternate crops.

The USDA's long term outlook for US oat production is forecasting virtually no change for the next 10 years. The 2010-2011 USDA forecast for returns over variable costs (net returns) for corn versus oats are \$372.05 and \$59.01 per acre, respectively. More profitable cropping options, low loan rates and flat consumption patterns will keep oats as a low volume coarse grain.

Mexico

For 2009-2010, Mexico is forecast to import 0.10 Mt of oats, making it the world's second largest oat importer next to the US. The imports of oats and oat products from Canada in 2009-2010 are forecast to be 0.01 Mt versus the 10 year average of 0.016 Mt. Mexico is forecast to import 0.10 Mt in 2010-2011.

Japan

For 2009-2010, Japan is forecast to import 0.06 Mt of oats, ranking it the world's third largest oat importer. The imports of oats and oat products from Canada in 2009-2010 are forecast to be 0.03 Mt similar to the 10 year average. Japan is forecast to import 0.06 Mt in 2010-2011.

MAJOR EXPORTERS

European Union

The EU is the world's largest oat producing region,

Figure 2 **US: OAT IMPORTS - SELECTED SOURCES** (CANADA AND EUORPEAN UNION) 2.1 Period in which the EU provided oat 1.8 export subsidies to Finland & Sweden 1.5 million tonnes 1.2 0.9 0.6 0.3 0.0 Source: USDA Canada = = European Union f: forecast, USDA

on average producing about one-third of the world's oats. EU production for 2009-2010 is forecast at 8.5 Mt. production forecast for 2010-2011 will decease slightly to 8.3 Mt. Finland and Sweden are the main oat producers: Poland and Germany are minor producers. Nearly all of the EU's oat production is used internally, 2004 to 2009 exports accounted for only about 2% of total production. Finland

and Sweden account for virtually all of the EU's exports.

When Finland and Sweden joined the EU in 1995, the EU provided both countries with oat export subsidies. The subsidy was to encourage oat production to remain in those countries and to prevent those acres from being converted to barley which could be subject to costly intervention arrangements if surpluses occurred. Starting 2006, the EU has not provided an oat export subsidy.

During the 1995 to 2006 period, EU oat exports to the US averaged 0.40 Mt per year. Since the end of the subsidy, EU oat exports to the US have

averaged just 0.04 Mt (Figure 2). Over the past 5 years the EU has averaged 0.15 Mt in total exports or about 6.5% of total world exports. For the 2010-2011 trade year the EU is forecast to export 0.30 Mt of oats.

Australia

Australian oat production is concentrated mainly in New South Wales and Western Australia, these regions account for about 75% of their oat production. Over the past 5 years Australia has averaged 0.14 Mt in total exports or about 6.3% of total world exports. For the 2010-2011 trade year Australia is forecast to export 0.15 Mt of oats

The majority of these exports are high quality oats for human consumption. Because of location Australian oats generally are utilized by the Asian markets; India, Japan and Korea are its major destinations. Australia oats competes with oats from Canada Alberta and the EU for these Asian markets.

Table 2

CANADA: OAT SUPPLY AND DISPOSITION								
August to July marketing year	2006 -2007	2007 -2008	2008 -2009	2009 -2010	2010 -2011f			
	million tonnes							
Carry-in Stocks	0.87	0.56	0.95	1.53	1.08			
Production	3.85	4.70	4.27	2.80	2.47			
Imports	0.02	0.02	0.02	0.02	0.02			
Total Supply	4.74	5.28	5.24	4.35	3.57			
Total Domestic Use	1.88	1.52	1.28	1.17	0.96			
Exports	2.30	2.81	2.43	2.10	1.80			
Carry-out Stocks	0.56	0.95	1.53	1.08	0.80			
Course: Statistics Canada								

Source: Statistics Canada f: forecast, AAFC

Canada

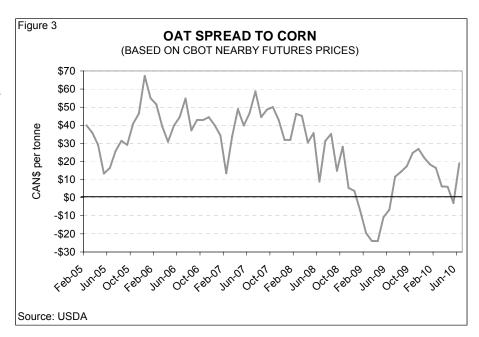
For 2010-2011, intended seeded acreage is 1.51 million hectares (Mha), similar to 2009-2010. Harvested area is estimated to increase by 8% or 1.03 Mha due to less abandonment and green feed production. However, yields are expected to decline from the record yields of in 2008-2009 and 2009-2010. Total production is forecast to decrease by 12% to 2.47 Mt (Table 2). Total supply is estimated to decrease by 18% to 3.57 Mt. Total domestic use is estimated to decrease by 18% to 0.96 Mt and total exports to decrease by 14% to 1.80 Mt. For 2010-2011 total carry-out stock are estimated to decrease from 2009-2010 by 26% to 0.80 Mt.

In 2010 producers intend to seed more oats in Manitoba and Alberta, 13% and 18%, respectively, but 13% less in Saskatchewan. Ontario had indicated no changes from 2009-2010. The Maritimes, Quebec and British Columbia had all indicated small increases for 2010.

Table 3

August to July marketing year	Alberta	Manitoba	Sask.	All Prairie Provinces	All Other Provinces	Total Canada		
	million tonnes							
1996-1997 to 2005-2006	0.55	0.60	0.97	2.12	1.34	3.46		
2006-2007 to 2010-2011	0.55	0.95	1.85	3.35	0.41	3.76		
Change	0%	58%	91%	58%	-69%	9%		

The face of oat production in Canada has changed over the past 2 decades. In August of 1991 oats was removed from the control of the Canadian Wheat Board and became a non-board crop. In 1995, the Western Grain **Transportation** Act was eliminated and rail rates have increased significantly for producers. With the change in marketing structure has come a change in production distribution (Table



3). From 1996-1997 to 2005-2006, prairie oat production had averaged about 60% of the total Canadian production. Over the 5 past years, prairie production has jumped to about 90% of Canadian production, an increase of 58%.

As Canadian exports have increased to the US, so has production in Manitoba and Saskatchewan because of their market access and transportation advantages to the main US market of Minneapolis, Minnesota. Saskatchewan oat production in the past 5 years has been nearly double that of the previous 10 year average. Alberta production has remained stable; servicing they're own equine market, domestic milling and international exports through the West Coast. Oat and oat product exports are estimated to decrease by 14% for 2010-2011, the majority of these will be sourced from Manitoba and Saskatchewan destined for a US destination.

PRICES

For 2010-2011, Chicago Board of Trade nearby oat futures are forecast to increase from 2009-2010 average of CAN\$165/tonne to an average of CAN\$170/tonne. With a 12% decline in Canadian production the price forecast has become bullish. In June oat futures increased sharply in response to lower Canadian production estimates. Total world coarse grain production is forecast to increase by about 1%.

Oats are highly correlated to corn in terms of pricing and in general track close to each other. In their July 2010 release, the USDA forecast for farm gate prices that US producers will receive in the 2010-2011 crop year are: corn at US\$3.75/bu or

US\$147.63/tonne and oats at US\$2.40/bu or US\$165.34/tonne.

Early forecasts by private analysts had 2010 Canadian oat acreage increasing by as much as 30%. But from January 2010 to May 2010 new crop oat futures prices decreased by over 28% and Canadian acreage estimates decreased along with the price drop. Very wet conditions at the end of May and into June on the Prairies caused the decrease in seeded area.

The premium for oats over corn, in the US, is forecast at about US\$18/tonne and is expected to remain tight. Over the past couple of years oats has lost much of its premium over corn (Figure 3). As strong US domestic corn demand for ethanol production has allowed corn to appreciate in value relative to oats. Since the US introduced the *Energy Policy Act of 2005*, the use of corn for ethanol has increased at an average rate of nearly 27% per year for the past 5 years.

CANADIAN RESEARCH AND FUNDING

The Cereal Research Centre, located in Winnipeg, Manitoba, is part of Agriculture and Agri-Food Canada's national network of 19 research centres. The Centre develops superior wheat and oat cultivars for the Canadian prairies. It supports cereal breeding programs at research centres across western Canada with research in: biotechnology; plant pathology; cereal chemistry; cereal genetics; and quality evaluation. Researchers also: develop improved methods to maintain the quality and safety of stored grain and grain products; monitor and study potential insect pests of stored cereals and oilseeds; and provide screening for regional disease resistance and

quality to cereal development programs for the prairies.

The Crop Development Centre (CDC) in Saskatoon, Saskatchewan is a field crop research organization within the Department of Plant Sciences at the University of Saskatchewan. CDC scientists integrate basic research with genetic improvement of oats and spring wheat, durum, canaryseed, barley, flax, field pea, lentil, chickpea, fababean and dry bean.

The Prairie Oat Growers Association (POGA) was formed in 1998 by a group of oat producers from Saskatchewan, Alberta and Manitoba. POGA is a voluntary organization of prairie oat growers established to promote the interests of oat growers and oat marketing. It consists of producers, and associate members from the handling, milling and supply sectors.

POGA's overall objective is to develop and support partnerships in the agricultural industry that will enhance the profitability of oats for the growers and increase its value to the customers. POGA activities focus on:

- Production and agronomic research;
- · Communicating research results to farmers;
- · Supporting market development initiatives;
- Networking with participants in research, processing and handling;
- Representing oat growers' views in policy development and regulatory matters.

Through POGA each of the three Prairie Provinces has since created its own oat producer association. The groups are funded through the collection of per tonne check offs or levies.

 The Alberta Oat Grower Commission (proposed), Saskatchewan Oat Development Commission (SODC) and the Manitoba Oat Growers Association (MOGA) all collect a \$0.50/t levy on oats grown within each province.

The Prairie Oat Breeding Consortium (POBC) was established in 1996, a unique blend of private industry and government interests and funding. Industry partners include Can-Oat Milling, Cargill, Emerson Milling, FarmPure Seeds, General Mills, Grain Millers Inc., Pepsi-QTG, SeCan and Austgrains of Australia along with Agriculture and Agri-Food Canada. The major goal is to provide growers, marketers and processors, (and ultimately, the consumers), with disease-resistant varieties which grow well in Canadian prairie conditions. The first producer funded research

investments began in June 2007 with a SODC contribution of \$25,000 to the CDC in Saskatoon for the development of new fed oat varieties. In July 2008, Saskatchewan oat growers committed to invest \$500,000 in University of Saskatchewan research on high-yielding and disease-resistant oat varieties focusing on oat agronomy, pathology, plant breeding, and genomics.

OUTLOOK

In a "Medium Term Outlook for Canadian Agriculture, International and Domestic Markets" which was released in January 2010 it was noted that the harvested area for Canadian oats would decrease by about 9% by 2019 compared to the 2005-2009 average. Higher grain and oilseed prices are expected to result in a modest expansion in total area and relative prices should lead to large increases of canola, corn, and soybeans. Of the major Canadian grains, barley was the only other crop to forecast a decrease by 2019 but it was less than 1%. DDG displacement of coarse grains in feed demand is expected to increase with Canadian ethanol production. Productivity gains in feed conversion are expected.

In February 2010, the USDA released its "USDA Agricultural Projections to 2019". Within this long-term projection it was noted that harvested area for US oats is expected to remain very stable through the forecast period. Plantings of different crops are influenced by expected net returns. Net returns are primarily determined by market prices, yields, and production costs. US producers will focus their efforts on corn, soybeans and wheat as these 3 crops account for about 90% of US major field crop production. USDA forecasted the farm gate price to average US\$2.30 per bushel over the next 10 years (to the end of the 2019-2020 crop year).

To some extent, the higher oat prices from 2005 to 2008 caused the traditional US equine markets to replace oats with complete pelleted corn rations. In the US, corn is readily available in large quantities. Although considered to be an inferior feed source for horses, reformulated corn rations have performed well enough to displace oats. The pellets, which generally come bagged, are becoming more popular because of there ease in feeding and handling.

Oats will have a difficult time recapturing this market segment considering the declining US oat acreage, increasing US corn acreage and increasing North American rail and truck rates for what is a "bulky" product to move.