



# Bi-weekly Bulletin

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## FEED BARLEY: SITUATION AND OUTLOOK

Over the past 20 years, the demand for western Canadian feed barley has shifted dramatically from the export market to the domestic feed market, as the livestock sector in Western Canada expanded and international competition intensified. For 2005-2006, domestic feed demand is expected to be strong, due to larger inventories of cattle and hogs and the partial opening of the United States (US) border to Canadian beef and cattle. However, larger domestic supplies of barley with below average quality, lower US corn prices, and the strong Canadian dollar are projected to depress the Lethbridge feed barley price to \$110 per tonne (/t), the lowest in 10 years. For exports, despite lower world corn prices, world feed barley prices strengthened early in the crop year, because of tighter exportable supplies from major exporters. The strong Canadian Wheat Board (CWB) Pool Return Outlook (PRO) relative to the domestic off-Board price has attracted large deliveries to the CWB which, when combined with less competition overseas and a wider spread of export over domestic prices, has provided export opportunities for Canada.

### WORLD COARSE GRAIN MARKET

#### Lower Coarse Grain Production and Stocks

The world coarse grain market consists mainly of corn, barley, sorghum, oats and rye. For 2005-2006, world coarse grain production is estimated by the United States Department of Agriculture (USDA) to decrease to 946 million tonnes (Mt) from the record of 1,008 Mt set in 2004-2005. Production is estimated to return to trend from the exceptionally larger 2004-2005 crops for almost all major producers. Total world supplies are expected to decrease by 25 Mt from 2004-2005, while consumption is virtually unchanged. As a result, carry-out stocks are projected to decrease by 13% and the stocks-to-use ratio is forecast to drop to 15%, the second lowest in 30 years.

#### Higher Supplies and Lower Prices in the US

US corn plays a dominant role in the world coarse grain market. US corn production in 2005-2006 is estimated by the USDA at 11.0 billion bushels (Gbu), second only to the record of 11.8 Gbu set in 2004-2005, as a higher harvested area only partially offset lower yields. US corn supplies, however, are expected to increase by 3%, as carry-in stocks more than doubled from 2004-2005. US domestic use is forecast to decrease marginally as a result of lower feed use which is partially offset by the higher demand from ethanol production. US exports, however, are forecast to increase to

2.0 Gbu, from 1.8 Gbu for 2004-2005. Carry-out stocks are expected to increase by 10% to 2.3 Gbu. The average US farm price for corn is currently forecast to decrease from US\$2.06 per bushel (/bu) in 2004-2005 to a midpoint of US\$1.80/bu, pressuring world coarse grain prices.

### WORLD BARLEY MARKET

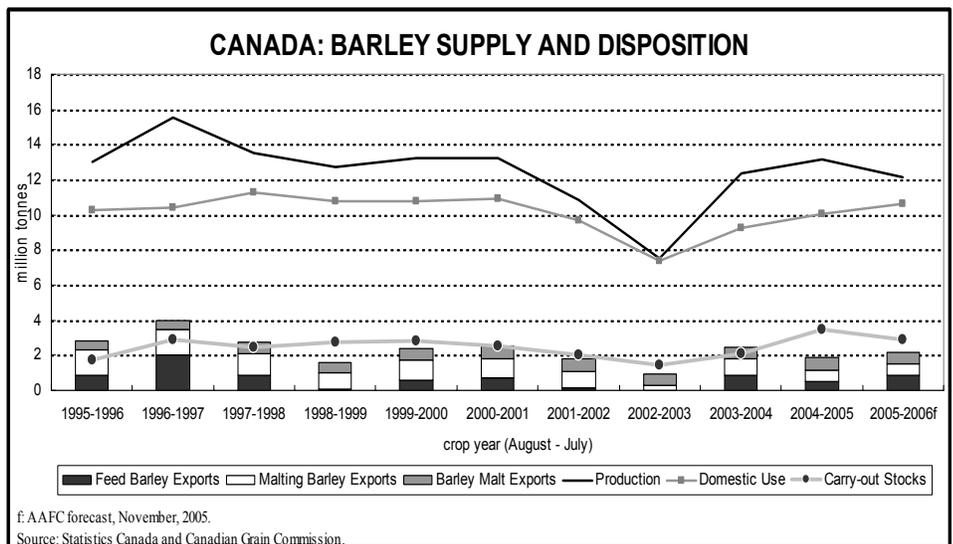
#### Lower Barley Production

For 2005-2006, world barley production is estimated by the USDA to decrease by 12% from 2004-2005 to 134 Mt. Production is estimated to decrease for the European Union (EU), the Black Sea region, Canada and the US. World supplies are expected to

decrease by 5% to 165 Mt because higher carry-in stocks only partially offset lower production. In response, world barley consumption is projected to decrease to 141 Mt, from 145 Mt in 2004-2005, of which feed barley consumption is forecast to decrease from 99 Mt to 96 Mt. As a result, world carry-out stocks are expected to decrease by 7 Mt from last year to 24 Mt and the stocks-to-use ratio is expected to decrease to 17%, from 22% in 2004-2005 and the 5-year average of 19%.

#### Lower World Trade

World barley trade is forecast by the USDA to decrease to 16.2 Mt, from 17.5 Mt for 2004-2005 and the five year average of



16.8 Mt. World feed barley exports are forecast by Agriculture and Agri-Food Canada (AAFC) to decrease from 12.5 Mt for 2004-2005 to 11.5 Mt. Among the major exporters, Russia and Ukraine are expected to export a combined 4.8 Mt of feed barley, followed by 3.0 Mt from Australia, 2.2 Mt from the EU and 0.9 Mt from Canada. For the major import markets, Saudi Arabia is forecast to import 6 Mt, followed by 2.4 Mt to other Middle East countries and 1.1 Mt to each of Japan and North Africa. Within the Middle East and North African market, import demand is expected to grow substantially for Algeria, while imports into Iran, Tunisia and Syria decrease sharply.

## CANADIAN PRODUCTION AND SUPPLIES

### Lower Barley Production but Slightly Higher Supplies

For 2005-2006, Canadian barley production is estimated by Statistics Canada at 12.1 Mt, down 8% from 2004-2005, due to a 4% decrease each in yields and harvested area. In western Canada, production decreased by nearly 50% in Manitoba and 9% in Alberta, while the crop in Saskatchewan is 5% larger. Excess moisture problems in southern Manitoba prevented the completion of seeding and damaged fields that were seeded, leading to an overall reduction in yield potential. Total supplies for Canada, however, increased by 2% to 15.7 Mt, as a result of higher carry-in stocks

### Below Average Crop Quality and Larger Feed Barley Supplies

The quality of the 2005-2006 barley crop in Canada is expected to be below average. The western Canadian crop has been negatively impacted by rain during harvest in Saskatchewan and Alberta. The quality characteristic that is affected the most is the germination rate. In addition, rain may also have resulted in lower plumpness, high moisture content, bleached or stained kernel and diseases. Depending on the growing stage, protein content could be high for the later planted crop. The crop is also very heterogeneous, due to the interruptions of planting in spring and harvesting in fall. The rains in 2005-2006 affected a much larger area than the frost in 2004-2005 and in each affected area, crop quality is affected to very different degrees in sub-areas.

Low, heterogeneous crop quality reduces the selection rate for malting barley, resulting in larger supplies of low-quality feed barley. The size of the malting barley Pool is projected by AAFC to be smaller than last year and the 10-year average. The

total supply of feed barley is estimated to increase to 13.5 Mt, from 13.0 Mt for 2004-2005.

## CANADIAN DOMESTIC DEMAND

Domestic feed consumption has been the dominant use for barley in Canada. With the robust growth of the western Canadian livestock industry, barley feed use (including waste and dockage) has increased by over 35%, from about 7.0 Mt in the early 1990s to 9.3 Mt in 2004-2005. Domestic feed consumption as a percentage of total use has grown from 60% to 78%. Exports, including exports of feed barley, malting barley and barley malt, have decreased from 35% to about 20%. This decline is due solely to the lower feed barley component in barley exports.

For 2005-2006, domestic feed use is expected to increase from 9.3 Mt last year to 9.8 Mt. Cattle and hog inventories have increased from a year ago. The opening of the US border to Canadian beef and live cattle of less than 30 months of age and lower availability of feed quality wheat are expected to raise feed barley demand. In addition, shipments of feed barley from western to eastern Canada are expected to increase, as Canadian corn production declined to 8.5 Mt, the lowest since 2000-2001.

The impact of the on-going countervailing and anti-dumping investigation is as yet not influencing prices for corn and feed barley. It is anticipated that a decision against the US will support prices in Canada.

## CANADIAN EXPORTS

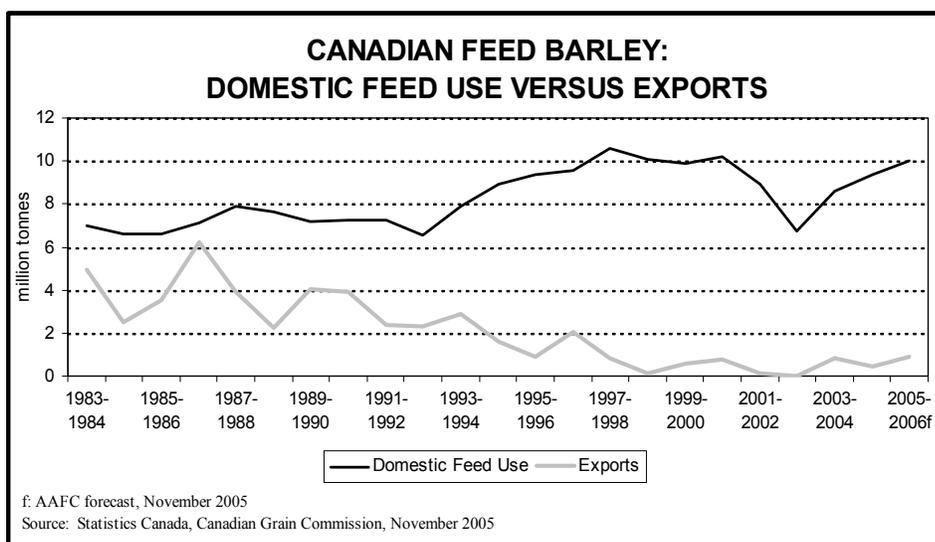
### The Downward Trend in Feed Barley Exports

Canadian feed barley exports have decreased significantly in the past 20 years, from over 6.0 Mt in 1986-1987 to an annual average of 450 thousand tonnes (kt) in the 2000s. Among the major factors contributing to this structural change are: (1) the removal of the *Western Grain Transportation Act* subsidy, (2) the rapid expansion of the livestock sector in western Canada and (3) intensified overseas competition, particularly from the EU and, more recently, Ukraine and Russia (Black Sea Region). The livestock sector in western Canada has become the largest user of feed barley and generally offers a higher return to farmers than the export market. Meanwhile, shipments of feed barley from the Prairies to other parts of Canada decreased substantially, following the elimination of the Feed Freight Assistance Program.

Canadian feed barley exports fell to the lowest levels in 2001-2002 and 2002-2003, following two consecutive years of drought-reduced production. However, exports rebounded to 0.8 Mt in 2003-2004 and 0.5 Mt in 2004-2005. For 2004-2005, limited exportable supplies from Australia and the US, light competition from the Black Sea Region and the EU, and a steady decline in ocean freight rates have raised export prices for North America and combined to provide sales opportunities for Canada. The majority of Canadian exports were made in the last half of the crop year.

### Higher Exports Forecast for 2005-2006

For 2005-2006, Canadian feed barley exports are forecast to increase to 0.9 Mt,



with the vast majority shipped from Pool A, covering August 2005 to January 2006. For the early months of this pooling period, heat and dry conditions in the EU and the Black Sea Region reduced exportable supplies. Carry-in stocks were lower and production was anticipated to drop in Australia. The US harvested their smallest barley crop since 1926. Tight supplies worldwide raised export prices and provided excellent opportunities for Canada. For the pooling period of Pool B (February-July 2006), exports are forecast to decrease significantly from Pool A due mainly to a much larger than previously expected barley crop in Australia.

## MAJOR CANADIAN EXPORT MARKETS

**Saudi Arabia** is the world's largest feed barley importer, with annual imports of 6.0 Mt or more than 50% of world trade. The sheep and goat industry in Saudi Arabia has been growing by 3% annually and this trend is expected to continue into the future. This expansion has been driven mainly by rapid population growth, although per capita disappearance is stable at 7 kilograms. Consequently, the demand for feed barley has trended higher with moderate fluctuations, driven by changes in the local grassland and forage situation.

The Saudi Arabian market was dominated by supplies from Australia in the early 1980s. Canada and the US replaced Australia in the late 1980s, with record exports of 2.3 Mt from the US and 1.9 Mt from Canada in 1986. In the 1990s, the EU became the largest exporter to this market. For the 2000s, although the EU and Australia continue to be the top suppliers, their status has been challenged by Ukraine and Russia, with a combined market share of over 40% in 2002-2003. For 2005-2006, feed barley imports to Saudi Arabia are forecast by the USDA to remain at 6.0 Mt. Canada is forecast to export 0.5 Mt to Saudi Arabia.

**Japan** is the world's second largest feed barley importer. Although corn is the dominant feed ingredient in Japan, barley is an important component of feed for Wagyu cattle, producing beef with a white, firm marbling of fat preferred by Japanese consumers. Barley is imported into Japan by one of two ways: (1) duty-free imports by the government on behalf of the licensed processors and (2) the Simultaneous Buy and Sell (SBS) system which allows end-users to tender directly and specify the quantity, quality and timing of transactions.

The SBS system is increasingly gaining popularity and accounted for over 60% of Japan's total barley imports in 2003-2004.

Japanese feed barley imports have dropped by over 20% in recent years from 1.4 Mt in 1998-1999 to 1.1 Mt in 2004-2005. This is attributed to higher meat imports, the BSE problems and an economic slowdown. As a result, Japan's share in the world import market has dropped from 15% to about 10%. For 2005-2006, feed barley imports into Japan are forecast by AAFC to remain at 1.1 Mt. Australia will continue to be the dominant supplier to the market, although its export volumes are expected to be below average. Imports from the US are also projected to decrease. For Canada, feed barley exports are forecast at 0.30 Mt, up significantly from 2004-2005.

## EXPORT COMPETITION

Australia, the EU, the Black Sea Region and the US are the major competitors for Canadian feed barley exports in the world markets.

**Australian** barley production in 2005-2006 is forecast by the Australian Bureau of Agricultural and Resource Economics to increase by over 30% from 2004-2005 to 8.4 Mt. Total supplies are expected to increase by 20% to 9.0 Mt due to a 40% decrease in carry-in stocks. Total domestic use of feed barley is forecast at 2.3 Mt. Consequently, feed barley exports are forecast to increase from 2.8 Mt last year to 3.0 Mt

The dry, warm summer and fall in the eastern states and South Australia has significantly lowered the anticipated 2005-2006 crop in Australia. Lower production expectations and tight carry-in stocks were among the major factors supporting world prices and providing export opportunities for Canada during late 2004-2005 and early 2005-2006. However, the above average rainfall in June provided an opportunity for late winter crop plantings and aided crops that had been dry sown, boosting production expectations to a level significantly higher than anticipated early in the crop year.

The emergence of the **Black Sea Region** as major exporters has pressured world prices because they are the least cost producers and enjoy the lowest freight costs to the Middle East and North Africa. Their market share has increased significantly in the last few years. For 2005-2006, exports from Ukraine are forecast by the USDA to be close to last year's 4.0 Mt, as large carry-

in stocks and reduced domestic use offset significantly lower production. Exports from Russia, however, are forecast to decrease from 1.5 Mt last year to 0.8 Mt, due to lower production. Lower exports from the region are expected to support world prices.

**EU** barley production in 2005-2006 is estimated by USDA to decrease by 14% from 2004-2005 to 53.0 Mt. With the exception of Denmark, production is estimated to decrease for all other major EU producers. The dry conditions in Spain are estimated to reduce barley output by 20%. Total EU supplies are expected to decrease by 3% as lower production more than offsets higher carry-in stocks. EU barley consumption is expected to decrease only marginally and carry-out stocks are forecast to drop by 27%. EU feed barley exports are forecast by AAFC to decrease from 2.7 Mt in 2004-2005 to 2.2 Mt. Due to lower exportable supplies and less competition from the Black Sea Region, the EU is expected to be less aggressive in subsidizing exports than in 2004-2005.

Barley production in the **US** has trended lower in the long-run, due to competition from other crops. For 2005-2006, US barley production decreased by 24% from 2004-2005 to 4.6 Mt, the lowest since 1926. Domestic consumption is forecast to drop by 16% to 4.8 Mt, due mainly to lower feed consumption. Total exports are forecast to drop by 60% from last year to 0.3 Mt and Canada is expected to pick up much of the market unfilled by the US.

## PRICE OUTLOOK

### Domestic Prices: Historically Low but Stronger Relative to US Corn

For 2005-2006, Canadian domestic feed barley prices are expected to be pressured by: (1) large carry-in stocks of low quality barley, (2) below average new crop quality, (3) lower US farm prices for corn and (4) the strength in the Canadian dollar. On the other side, prices are expected to be supported by: (a) lower western barley production, (b) stronger feed demand from the cattle and hog sectors, (c) higher demand for exports overseas. High energy costs and logistic constraints are expected to keep transportation costs high, pressuring on-farm returns and lifting feedlot prices.

For the crop-year-to-date (August-October 2005), Chicago Board of Trade (CBOT) corn nearby futures prices averaged US\$80/t, down 4% from the same period a year ago. For the same period, the Canadian dollar appreciated by 6%, from

CAN\$1.27/US\$ to CAN\$1.19/US\$. As a result, CBoT corn nearby prices in Canadian dollars decreased by 9%, from CAN\$103/t to CAN\$94/t. Western Canadian feed barley prices, in-store Lethbridge for No. 1 Canada Western (CW), averaged \$107/t, only 4% lower than a year ago, suggesting strong feed barley prices in western Canada, relative to corn prices in the US.

For 2005-2006, the Lethbridge feed barley price is forecast to average \$110/t, slightly lower than \$112/t for 2004-2005 and significantly lower than the 5- and 10-year average of \$141/t and \$137/t, respectively.

### Export Prices: Historically Low but Stronger than Domestic Prices

Canada is a minor player and price taker in the world feed barley market. World feed barley prices in 2005-2006 are expected to be supported by: (1) lower world barley production and tighter exportable supplies from the EU, Australia, the US and Russia, (2) tighter world coarse grain supplies, (3) a steady demand from major importing regions and (4) less aggressive use of export subsidies by the EU. World prices are expected to be pressured by lower US corn prices. Canadian feed barley export prices are being further depressed by the strength in the Canadian dollar.

For the crop-year-to-date, PNW feed barley prices have averaged US\$122/t, 17% higher than a year ago. In Canadian dollars, the price increased by 10%, from CAN\$132/t a year ago to CAN\$145/t. To date, the spread between the PNW and Lethbridge price has

averaged CAN\$38/t, compared to CAN\$20/t a year ago. This spread, as well as decreases in the other major exporters' supplies, has provided good sales opportunities for Canada.

For the remainder of 2005-2006, the PNW feed barley price is expected to average about CAN\$135/t, \$6/t below current prices, following the arrival of the new crop from Australia. Canadian feed barley exports for Pool B are expected to decrease significantly compared to Pool A. The annual average PNW feed barley price is forecast at CAN\$140-145/t for 2005-2006, compared to CAN\$139/t for 2004-2005 and the five year average of CAN\$169/t.

### The Imperfect Substitution of Corn for Barley

The strength of the PNW barley export price, relative to both domestic prices in Canada and corn prices in the US, is reflective of the imperfect substitution of corn for feed barley in both North America and world feed grain markets. A varied feed value for various animals, different feeding traditions/practices, special requirements, and logistic constraints are among the major elements underlying this imperfect substitution.

### CWB PRO

The CWB November PRO for No.1 CW Feed Barley, Pool A is \$126/t, in-store Vancouver/St. Lawrence, versus \$117/t for Pool A of 2004-2005. For Alberta, the on-farm return from deliveries to Pool A average \$77/t, close to that from off-Board deliveries. In 2004-2005, the on-farm return

from the off-Board market was \$14/t higher than for Board deliveries. The strength of the current CWB PRO is attracting Board deliveries from larger areas in the province

For Pool B, the PRO is forecast by the CWB at \$118/t, compared to \$129/t for Pool B of 2004-2005. Timely rains have boosted estimates for Australian barley production and the Canadian dollar is projected to remain strong, pressuring exports prices. The average PRO for 2005-2006, weighted by volume, is forecast by AAFC at about \$125/t, compared to \$123/t for 2004-2005.

The shorter pooling period, created by splitting the crop year into Pool A and B, and new farm delivery programs and options have put the CWB in a better position to take advantage of sales opportunities, increase farm returns and better manage price risk.

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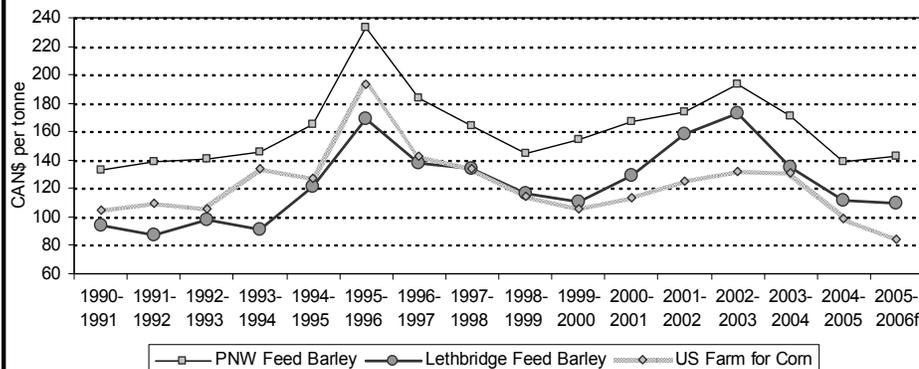
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## CANADIAN DOMESTIC AND EXPORT PRICES FOR FEED BARLEY AND US FARM PRICES FOR CORN



f: AAFC forecast, November 2005

Source: United States Department of Agriculture, Chicago Board of Trade and Winnipeg Commodity Exchange, November 2005

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