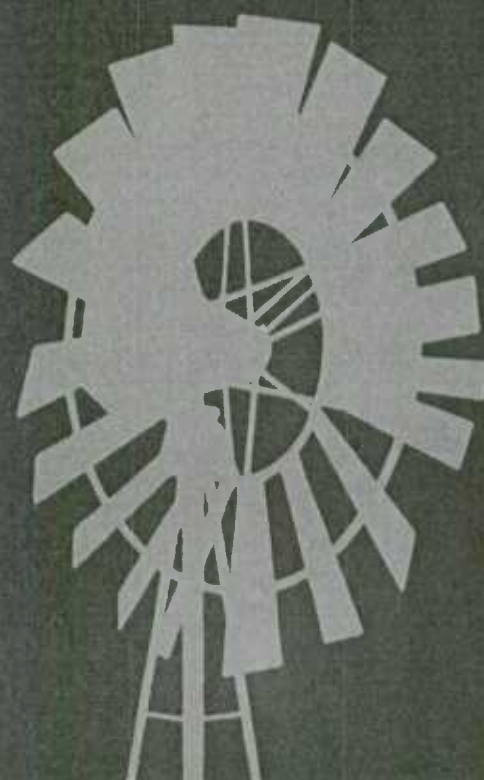


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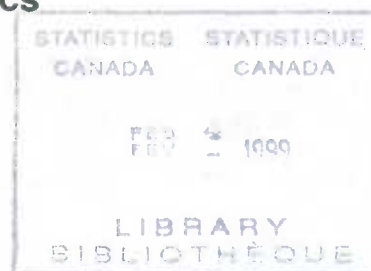
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Karen Gray, Statistics Canada

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PREFACE

This document is one of a series of methodology papers prepared in the Agriculture Division of Statistics Canada. It is intended to provide users with a better understanding of the procedures followed by the agricultural statisticians.

INTRODUCTION

The Grain Marketing Unit of the Agriculture Division of Statistics Canada is the central source of supply and disposition data on the principal grains and oilseeds produced in Canada. The unit brings together information from a wide range of sources, both internal and external to Statistics Canada, to produce two publications and a variety of unpublished data series.

This report describes the methods employed by the Unit. Supply-disposition analysis will be presented in detail. Also to be reviewed are the unit's price data, surveys, data quality and methods of data dissemination.

1.1

SUPPLY-DISPOSITION ANALYSIS-AN OVERVIEW

Supply-disposition tables or balance sheets are primary tools for grain analysts.

The general format of a supply-disposition table is shown below.

| | | |
|---|--------------------------|--|
| | Beginning Inventory | |
| + | Production | |
| + | Imports | |
| = | TOTAL SUPPLIES | |
| | Domestic Use | |
| + | Exports | |
| + | Ending Inventory | |
| = | TOTAL DISPOSITION | |

Supply-disposition tables are calculated at various levels of the grain marketing system. The farm s&d shows the supply and disposition of grain from the farm to the primary elevator. The commercial s&d shows the movement of grain from the primary elevator to the process or terminal elevator level, including exports. The national s&d combines the farm and commercial s&d's. There is no farm supply-disposition table for corn; however, supply-disposition tables which appear similar to the national tables are produced for corn for Ontario, Quebec, Other provinces and Canada due to the availability of the required data. International supply-disposition tables provide information on grain marketing in the principal exporting and importing nations.

1.2

THE FARM SUPPLY-DISPOSITION TABLE

The farm supply-disposition table (or supply-demand table) provides information only on farm activity. Commercial activity is totally excluded.¹

Supply-disposition tables are calculated on a crop-year basis beginning on August 1 and ending on July 31 for most commodities. Supply-disposition tables for Ontario winter wheat are calculated on a July-June crop year. Tables for soybeans and corn are produced on a July-August crop year.

A farm supply-demand table consists of the following:

| | |
|---|-----------------------------------------|
| | Opening Stocks, Farm Level |
| + | Production |
| + | Feed Freight Assisted Shipments |
| = | TOTAL SUPPLY |
| | Deliveries (or marketings) |
| + | Seed use |
| + | ending stocks(or carryover), farm level |
| + | Feed, waste and dockage |
| = | TOTAL DISPOSITION |

Total supply always equals total disposition.

SUPPLY:

Data on grain production and farm stocks are obtained from **The Field Crop Reporting Series**, Statistics Canada catalogue no. 22-002. The data in that series are based on telephone surveys of Canadian grain producers. Farm stocks include marketable (whole, crushed or rolled) grain plus reserves for feed and seed as well as dockage. Prepared or name brand feed held on the farm is excluded. Opening stocks are sometimes referred to as carry-in. Production data are estimated on a 'field run' or dockage included basis. For further information on the estimation of farm stocks and production please consult **Field Crop Reporting Series-Data Sources and Estimation Procedures**.

¹ See Appendix A for an example.

Data on feed freight assisted grain shipments are obtained from the Livestock Feed Bureau of Agriculture Canada.²

It is assumed that the imports of grain directly to farms is insignificant; therefore, no import data are included in the table.

DISPOSITION:

The leaving of grain by a farmer at a primary elevator, feed mill, crushing plant, flour mill, etc. in exchange for a cash or storage ticket is referred to as a delivery. The grain does not have to be sold at the time of the delivery.

The Canadian Grain Commission licenses the majority of western elevators under the Canada Grains Act. Producer deliveries to these elevators are monitored by the Canadian Grain Commission from cash ticket information.

The Canadian Grain Commission publishes cumulative western delivery data on a weekly basis which include both Board and non-Board deliveries to the **licensed** elevator system. The Grain Marketing Unit prorates any cumulative revisions to the delivery data made by the Grain Commission back to the previous months of the same crop year because the Commission does not provide revised delivery data by month. The prorations are based on the previously existing monthly delivery data.

Ontario corn, soybean, wheat and canola deliveries are obtained from administrative check-off data from The Ontario Corn Producers' Association, The Ontario Soybean Growers' Marketing Board, The Ontario Wheat Producers' Marketing Board and The Ontario Canola Growers' Association.

In Quebec and the Maritime provinces, marketings are composed of quantities of grain milled (obtained from the monthly or annual millers' survey) and of deliveries obtained from the Livestock Feed Bureau of Agriculture Canada. Quebec marketings are supplemented by data from La Fédération des Producteurs des Cultures Commerciales du Québec.

Unlicensed deliveries for **Western Canada** are estimated by the Grain Marketing Unit and are added to the licensed delivery totals to produce the deliveries numbers which appears in the supply-disposition table. Unlicensed deliveries represent deliveries direct to unlicensed feedmills and distillers, estimates of the interprovincial movement of canola and off-quota exports to the United States.

Deliveries to unlicensed feed mills are estimated during the current year on the basis of constants based on the Survey of Manufactures.

Unlicensed deliveries of rye to the distillers using rye are obtained annually directly from the companies. Data for the current year are based on the previous year and are revised with actual data at year-end.

² See Appendix B for the methods employed.

Estimates of interprovincial canola movement are obtained from the monthly survey of crushers-**Report of Crushing Operations**.

Another component of the unlicensed deliveries is off-quota exports of non-Board grains to the United States. These exports are the difference between the licensed export data provided by the Canadian Grain Commission and the total exports published by the International Trade Division of Statistics Canada originating with the administrative records of the U.S. Bureau of Commerce.

Seed requirements for the next crop year are based on average seeding rates multiplied by the area seeded. The average seeding rates are determined through an occasional survey conducted by the Field Crop Reporting Unit of Statistics Canada in late May/early June. The next survey is expected in June 1995.

Estimation of ending stocks, also sometimes called carryover, is the same as that for the opening stocks discussed under SUPPLY. Ending stocks for one crop year automatically become the opening stocks for the next crop year.

The feed, waste and dockage figure is determined residually (ie. by subtraction) after all other supply-disposition data are taken into account. This figure is commonly considered to be on-farm feed. No attempt is made to actually estimate feed, waste and dockage; however, the residually calculated data are analyzed to ensure that they relate to indicators such as the number of grain consuming animal units on farms and in feed lots, the harvest conditions affecting grain quality, the established ratios of dockage to delivered grain and grain inspections as reported by the Canadian Grain Commission.

The supply-disposition tables are usually revised five or six times per year, after the release of major data such as stocks, production, Canadian Grain Commission annual revisions or annual trade data revisions. The supply-disposition tables are arranged in three sections: August to December, January to March and April to July.

1.3

THE COMMERCIAL SUPPLY-DISPOSITION TABLE

The commercial supply-disposition table³ provides information on grain marketing at the commercial level only. No farm activity is included. The commercial level is defined as that part of the grain handling system starting at the primary(or country) elevator to the process and terminal elevator, including exports.

The Grain Marketing Unit does not publish commercial supply-disposition tables; however, it does develop these tables for the major Canadian grains for internal purposes. These tables are important for weekly verification of the commercial data available from the Canadian Grain Commission. As well, the supply and disposition tables are used in the estimation of the farm stocks data.

Supply-disposition tables are calculated on a crop year basis beginning on August 1 and ending on July 31. Commercial supply-disposition tables are prepared weekly on a national basis.

A commercial supply-demand table consists of the following:

| | |
|---|------------------------------------------------|
| | Opening Stocks, commercial level (or visibles) |
| + | Producer deliveries |
| = | TOTAL COMMERCIAL SUPPLIES |
| | Exports (clearances) |
| + | Domestic disappearance |
| + | Ending stocks, commercial level (or visibles) |
| = | TOTAL COMMERCIAL DISPOSITION |

Total supplies always equal total disposition.

The data for this table are estimated by the Canadian Grain Commission. All data are reported net of dockage.

SUPPLY:

Opening stocks consist of stocks held in the primary (or country) elevator system, at terminal positions, at Eastern transfer elevators, in Western process elevators, in mill bins and in transit.

³ See Appendix C for an example.

Producer deliveries to the licensed system include both Board and non-Board grain. Unlicensed deliveries are not included since the Canadian Grain Commission data comprise only licensed deliveries.

DISPOSITION:

Exports include clearances of bulk grain as collected by the Canadian Grain Commission during the weighing, grading and loading of grain at terminal elevators. Export clearances are termed 'net'; however, exports of flaxseed and canola include approximately two per cent dockage.

These data differ, sometimes significantly, from the export data published by the International Trade Division of Statistics Canada which are obtained from Revenue Canada, Customs and Excise documents or, in the case of the United States, from U.S. customs records. Clearances from the Canadian Grain Commission include only exports that are made through licensed facilities and thereby exclude unlicensed exports of non-Board grains such as truck shipments of flaxseed or oats to the United States or export shipments of wheat and barley originating outside the Canadian Wheat Board area of Manitoba, Saskatchewan, Alberta and the Peace River District of British Columbia.

The differences between these two data sources are discussed in more detail in the section on data limitations.

Domestic disappearance in the commercial system includes only grain shipped within the licensed system for use within Canada. It includes grain destined for processors (crushing plants or flour mills) and some grain shipped for domestic livestock feeding but does not include deliveries of grain to unlicensed feed mills. Domestic disappearance data in the commercial system represent only a small portion of the total amount of grain used for domestic purposes in Canada which is estimated on the National Supply-Disposition Table. Most domestic disappearance of grain occurs on farms or moves outside the elevator system in farm to farm and farm to feedlot transactions.

Estimation of ending stocks is the same as for the beginning stocks discussed under SUPPLY. Ending stocks for one crop year automatically become the opening stocks for the next crop year.

The commercial supply-disposition tables are produced weekly and are revised at the end of the crop year after the release of the Canadian Grain Commission's annual revisions.

IMBALANCE:

An excess of disappearance over supply (a negative imbalance) usually indicates a lag in the reporting of deliveries to the Canadian Grain Commission or quantities of grain in transit. An excess of supply over demand (a positive imbalance) is less common and may indicate a problem with one component of the disposition data.

It is fairly common for rye to be blended with wheat, resulting in a positive imbalance because the rye disposition is low.

1.4 THE NATIONAL SUPPLY-DISPOSITION TABLE

The national supply-disposition table⁴ provides information on all levels of the grain marketing system. It is a combination of the farm supply-disposition and the commercial supply-disposition tables.

The supply-disposition tables are usually revised five times per year, after the release of major data such as stocks, production, Canadian Grain Commission annual revisions or annual trade revisions. The tables are arranged in three sections: August to December, January to March and April to July.

SUPPLY:

Stocks consist of the total of the farm and commercial stocks. The farm stocks include marketable (whole, crushed or rolled) grain plus reserves for feed and seed as well as dockage. The commercial stocks include stocks held in the primary(or country) elevator system, at terminal positions, at Eastern transfer elevators, in process elevators, in mill bins and in transit and are net of dockage.

Production and farm stock data are obtained mainly from **The Field Crop Reporting Series**, Statistics Canada catalogue no. 22-002. The data in that series are based mainly on telephone surveys of Canadian grain producers. Commercial stock data are obtained mainly from the administrative records of the Canadian Grain Commission. Millbin data are obtained mainly from the **Millers Monthly Report** survey and are added to the Commission wheat stocks.

Import data are collected from administrative records of Revenue Canada, Customs and Excise. These data are published by the International Trade Division of Statistics Canada according to the Harmonized System, an international commodity classification system.

| | |
|---|---------------------------|
| | Opening Farm Stocks |
| + | Opening commercial stocks |
| + | Production |
| + | Imports |
| = | TOTAL SUPPLIES |

Producer deliveries are not included in the national supply-disposition tables because the deliveries are a supply in the commercial supply-disposition table and a disposition in the farm supply-disposition table and thus cancel out.

Feed freight assisted shipments are also excluded from the national supply-disposition table since shipments from one province to another cancel out at the national level.

⁴ See Appendix D for examples.

DISPOSITION (CEREALS ONLY):

The cereals (wheat, oats, barley, rye) disposition includes estimates of grain exports, product exports, human food and industrial use, loss in handling and seed requirements for the next year's crop. The feed, waste and dockage component is calculated residually.

| | |
|---|-------------------------------|
| | Grain Exports |
| + | Product exports |
| + | Human food and industrial use |
| + | Loss in handling |
| + | Seed requirements |
| + | Feed, waste and dockage |
| + | Ending farm stocks |
| + | Ending commercial stocks |
| = | TOTAL DISPOSITION |

DISPOSITION (OILSEEDS ONLY):

The oilseeds(flaxseed and canola) disposition includes exports, domestic processing(crushing), loss in handling and seed requirements for the next year's crop. The feed, waste and dockage component is calculated residually.

| | |
|---|--------------------------|
| | Grain Exports |
| + | Domestic processing |
| + | Loss in handling |
| + | Seed requirements |
| + | Feed, waste and dockage |
| + | Ending farm stocks |
| + | Ending commercial stocks |
| = | TOTAL DISPOSITION |

NOTES ON INDIVIDUAL BALANCE SHEET DATA POINTS:

EXPORTS:

For cereal grains, exports consist of bulk grain and product exports. Bulk wheat and barley exports represent export clearances as reported by the Canadian Grain Commission. Bulk oats and rye export data represent data published by the International Trade Division of Statistics Canada and originally obtained from administrative records of Revenue Canada, Customs and Excise or, in the case of exports to the United States, from the U.S. Bureau of Commerce.

Product exports are processed cereal products such as flour and malt which are converted to bulk grain equivalents. The conversion factors are obtained from the **Millers Monthly Report** and are updated every few years. Product export data are published by the International Trade Division of Statistics Canada and were originally obtained from administrative records of Revenue Canada, Customs and Excise or, in the case of exports to the United States, from the U.S. Bureau of Commerce.

For oilseeds, exports consist only of the seed. These data are obtained in the same manner as the product exports.

Trade data published by the International Trade Division of Statistics Canada are classified according to the Harmonized System, an international commodity classification. The commodity codes for the major grains and grain products are shown in Appendix J.

HUMAN FOOD AND INDUSTRIAL USE:

For cereals, the human food and industrial use data are mainly collected from the survey **Millers Monthly Report**. An adjustment is made to remove flour exports from the domestic use totals. Data from the Survey of Manufactures supplement the millers' reports. There is often a considerable time delay in the availability of the Census data used for this portion of the supply-disposition table. Therefore, this component of the table is usually estimated on a current basis. Since human food use tends to be fairly stable from year to year and the quantity is relatively small, the effect of any possible estimation error is considered limited.

The food uses of cereal grains are:

| | |
|---------|------------------------------------------------------|
| Wheat: | wheat flour, breakfast foods and miscellaneous foods |
| Oats: | oatmeal, rolled oats, breakfast foods, flour |
| Barley: | pot and pearl barley, breakfast foods |
| Rye: | flour and breakfast foods |

The industrial uses of cereals are:

Wheat: miscellaneous chemicals, pulp and paper, brewing
 Barley: distilling and brewing(malt)
 Rye: distilling

For oilseeds, the human food and industrial use component consists of oilseed crushings obtained from the monthly survey of Canadian oilseed crushers- **Report of Crushing Operations.**

LOSS IN HANDLING:

Loss in handling includes drying loss, outturn loss(the difference between the loading and unloading weights of ships or railcars), fire loss and losses due to unusual circumstances such as train derailments and maritime disasters and adjustments to accommodate special export agreements. The adjustments normally result from the blending of grain at terminal positions, usually to produce different grades of grain. The loss in handling category also includes gains in the net weight of grain due to overages from weighovers and dockage shipped in flaxseed and canola within allowable tolerances. These handling data are compiled by the Canadian Grain Commission from information reported by licensees as the grain moves through the licensed elevator system.

SEED REQUIREMENTS:

Seed requirements for the next crop year are based on average producer seeding rates multiplied by the area seeded. The average seeding rates are determined through the annual **Survey of Seeding Progress** conducted by the Field Crop Reporting Unit in late May or early June.

FEED, WASTE AND DOCKAGE:

Feed, waste and dockage data are calculated residually (ie. by subtraction) in the supply-disposition tables. No attempt is made to actually estimate feed, waste and dockage as is done in some countries; however, the residually calculated data for cereals are analyzed to ensure that they relate to a variety of check data such as:

1. The number of grain consuming animal units on farms and in feed lots. (Is feeding increasing or decreasing?).
2. Pasture conditions. (The condition of pastures influences the need to grain feed cattle.)
3. Grain quality. (Adverse weather can decrease crop quality and increase the amount of feed grains available.)
4. Relative prices. (A relative price advantage of one feed grain over another normally indicates an increase in the proportion of that grain fed.)

5. Supplies versus the ability to deliver the grain. (If farmers have a lot of one grain but no quotas, they may feed more of that grain relative to another grain that they can deliver.)

The feed, waste and dockage category for oilseeds is considered primarily as dockage since bulk oilseeds are not normally suitable as livestock feed. Dockage rates for oilseeds are relatively large compared to cereals.

RELEASE SCHEDULE:

The national supply-disposition tables are produced about five times per year, after the release of major data series such as stocks, production, Canadian Grain Commission revisions or annual trade data revisions. The tables are arranged in three sections: August to December, January to March and April to July.

1.5

THE CORN SUPPLY-DISPOSITION TABLES

The corn supply-disposition tables⁵ are similar to the national supply-disposition tables except that data are produced for Ontario, Quebec, Other provinces as well as Canada.

Farm stocks are obtained from the **Field Crop Reporting Series**. Commercial stocks are a composite of several data sources. Canadian stocks are comprised of total visibles published in **The Weekly** by the Canadian Grain Commission and grain corn stocks at month end from Ontario country elevators and feed manufacturers (own and terminal stocks) obtained from the **Corn Use and Movement Report** prepared by the Ontario Ministry of Agriculture and Food. Ontario commercial stocks are comprised of the Canada commercial stocks minus visible stocks at primary elevators (**The Weekly**, page 3) minus corn in-transit in the western division (**The Weekly**, page 3). Stocks for Other Provinces are the summation of the visible stocks at primary elevators and corn in-transit in the western division.

Production data are obtained from **The Field Crop Reporting Series**.

Import data are as published in **Imports by Commodity** by the International Trade Division of Statistics Canada.

Exports to Quebec are obtained from the Canadian Livestock Feed Bureau's (Agriculture and Agri-Food Canada) quarterly survey and from the Ontario Ministry of Agriculture, Food and Rural Affairs' report on the use of corn by Quebec distillers. The data obtained from the Livestock Feed Board are adjusted into the proper trimester groupings by assuming that all months carry an equal weighting.

Exports to the Maritimes are obtained from the Canadian Livestock Feed Bureau's **Feed Freight Assisted Shipments by Province of Destination**.

Exports overseas are obtained from the International Trade Division of Statistics Canada as published in the publication **Exports by Commodity**.

Industrial use of corn is obtained from the Ontario Ministry of Agriculture, Food and Rural Affairs and is the total grain corn used in Ontario by industrial users.

Seeding requirements for the next crop year are based on average producer seeding rates multiplied by the area seeded. Average seeding rates are determined by the annual **Survey of Seeding Progress** conducted annually by the Field Crop Reporting Unit of Statistics Canada in late May or early June.

Feed, waste and dockage are calculated residually.

⁵ See Appendix E for an example.

1.6 THE INTERNATIONAL SUPPLY-DISPOSITION TABLES

International supply-disposition tables for wheat and coarse grains are published monthly. International data availability precludes the development of similar supply-disposition tables for oilseeds; however, some of the available international oilseed data are also published.

The international supply-disposition table is similar to the national s&d. Supplies consist of world production, imports and beginning stocks. Disposition consists of exports, domestic use and ending stocks.

Countries around the world have different marketing years due mainly to climatic differences. Since marketing years are not consistent between countries, care should be taken in adding stocks for these differing periods.

The source of the international tables is usually the United States Department of Agriculture, Foreign Agriculture Services although information from other trade sources such as the International Wheat Council or the publication '**OIL WORLD**' is sometimes used. The national supply-disposition table is used for Canada. Projections are obtained from Agriculture and Agri-Food Canada for the current crop year's exports and domestic utilization.

1.7 THE SUPPLY-DISPOSITION TABLES, GRAIN PRODUCTS⁶

Special national supply-disposition tables are prepared for some grain products such as canola oil, canola meal, soybean oil, soybean meal, wheat flour and malt. Data are calculated annually on a crop year (August-July) basis.

OIL AND MEAL-NOTES ON INDIVIDUAL BALANCE SHEET DATA POINTS:

Production and stock data are obtained from the **Report of Crushing Operations** survey discussed in the survey section of this report. Stocks of canola include those held at crushing plants, in transit and at export positions. Stocks of soybeans are at crushing plants only. No data are available on soybeans in-transit or at export positions; however, the volume of soybeans in these positions is considered to be negligible.

Import and export data are obtained from the International Trade Division of Statistics Canada. The data originate with administrative records of Revenue Canada, Customs and Excise or, in the case of exports to the United States, with the U.S. Bureau of Commerce.

Oil and meal available for domestic use data are calculated residually (ie. by subtraction) in the disposition portion of the supply-disposition tables.

WHEAT FLOUR-NOTES ON INDIVIDUAL BALANCE SHEET DATA POINTS:

Production and stock data are obtained from the **Millers Monthly Report** survey discussed in the survey section of this report.

Export data are obtained from the International Trade Division of Statistics Canada. The data originate with administrative records of Revenue Canada, Customs and Excise or, in the case of exports to the United States, with the U.S. Bureau of Commerce.

Wheat flour imports are omitted from the analysis. Historically, import licenses from the Canadian Wheat Board were required for the importation of wheat or wheat products. This requirement was dropped in May 1991 due to provisions of the Canada/U.S. Free Trade Agreement; however, imports of wheat flour have so far been minimal.

Domestic disappearance data are calculated residually (ie. by subtraction).

MALT BARLEY-NOTES ON INDIVIDUAL BALANCE SHEET DATA POINTS:

Producer deliveries are the total of deliveries to the Canadian Wheat Board designated barley pool which comprise the total supply. (The pool year may differ slightly from the crop year.)

The total disposition includes three components: exports; brewer and distiller use; and stock change/residual.

⁶ See Appendix F for examples.

Grain (malting barley) exports are obtained from the Canadian Grain Commission. Malt exports are obtained from the International Trade Division of Statistics Canada and originate with administrative records of Revenue Canada, Customs and Excise or, in the case of exports to the United States, with the U.S. Bureau of Commerce. The exports used in the supply-disposition table consist of malting barley grain exports and malt exports converted to grain equivalent using a factor of 1.219.

Data on the use by brewers and distillers are obtained from the **Annual Survey of Manufactures**, a survey conducted by the Industry Division of Statistics Canada.

The stock change/residual is calculated (total disposition-total exports-brewer and distiller use). The calculated figure is compared to other known variables to ensure data quality; for example, the stock change estimate is comprised of a) the stock change in malt at maltsters converted to a barley equivalent by a factor of 1.219 and b) the stock change in barley at maltsters. The stock change in malt is calculated as the difference between the quantity of malt produced and the quantity of malt shipped. The stock change in barley is calculated as the difference between the purchases and usage of barley. These stock data are obtained from malt manufacturers reporting to the **Annual Survey of Manufactures**.

CONVERSION FACTORS:

Occasionally, product data must be converted back to their equivalent in grain. A table of the conversion factors used for this purpose is contained in Appendix K.

2.0

PRICE DATA

The Grain Marketing Unit produces tables on cash and futures market prices of grains which are published in **The Cereal and Oilseeds Review** and **The Grain Trade of Canada**.

The purchase and sale of grain takes place in two related but separate markets-the cash market and the futures market. Both markets are of key importance to the domestic and international purchase and sale of grain. They are differentiated by the fact that private trades of physical grain take place in the cash market and public auctions of futures contracts take place in the futures market.

The purchase and sale of actual grain, commonly referred to as cash trading is the most widespread activity in the marketing of grain. Most of it is done by direct contact between principals. Cash trading takes place in both Board and non-Board grains.⁷

The futures market involves the trading of contracts for delivery of the grain during a prescribed month in the future. These contracts specify the grade and trading unit of the commodity, the delivery month, the delivery point and the terms of delivery. Traders decide the price of the contract and the total number of units. Futures contracts are traded in an open, auction-type market.⁸

The price data used by the Grain Marketing Unit are obtained from a wide variety of sources. Canadian cash prices are obtained from The Canadian Wheat Board, The Winnipeg Commodity Exchange, the publication **Farm Market News** produced by The Ontario Ministry of Agriculture and Food, The Ontario Wheat Producers' Marketing Board and from a survey of industrial firms done by the Prices Division of Statistics Canada. Cash grain prices for the United States are obtained mainly from United States Department of Agriculture offices throughout the United States. Future prices, volumes and open interest data are obtained from The Winnipeg Commodity Exchange in Canada and from The Chicago Board of Trade, The Kansas City Board of Trade and The Minneapolis Grain Exchange in the United States. Exchange rate data are obtained from The Bank of Canada.

The monthly average and crop year average prices are simple averages (ie. not weighted) except for the oils and meals. The prices for oils and meals are weighted monthly to account for the differences in prices between the domestic and export markets; however, the crop year averages for these commodities are simple averages of the monthly averages.

⁷Wilson, C.F., **Canadian Grain Marketing**, Canadian International Grains Institute, 1979

⁸The Winnipeg Commodity Exchange, **Grain and Oilseed Futures**

3.0

GRAIN MARKETING SURVEYS

The Grain Marketing Unit conducts two monthly mail surveys.

3.1 The Millers' Monthly Report⁹ is a survey of all Canadian companies milling grain for human consumption. Sixteen companies are surveyed at the end of each month. Eleven companies are surveyed only annually on the **Millers' Annual Report** due to their small processing volumes.

The mailing list for the survey is updated annually from the **Annual Survey of Manufactures**, a survey conducted by Statistics Canada's Industry Division. Updates are also regularly obtained from trade sources.

The survey asks for the amount of grain milled, products produced by grade, stocks in mill bins(unlicensed positions), operating days and plant capacity. Some of these data are used for survey editing purposes and are not published; however, survey summary data are published in the monthly Statistics Canada publication **Cereals and Oilseeds Review**. Annual data are published in **The Grain Trade of Canada**.

The survey questionnaires are edited manually prior to data entry. The main survey edits are:

- Checking that the plant is still milling the same grains and producing the same products. Changes in plant activity are verified with the company.
- Ensuring that the flour produced ranges from 73-78% of the grain milled.
- Ensuring that the flour and millfeed production does not exceed the amount of grain milled. On the rare occasion when this does happen, the millfeeds are edited down to an acceptable level.

3.2 The Report of Crushing Operations¹⁰ is a monthly survey of all plants involved in oilseed crushing.

The mailing list is updated from trade sources on a regular basis.

The survey obtains the amount of seed crushed (canola, soybean, flaxseed and sunflowerseed), the amount of oil and meal produced, month-end stocks of bulk oilseeds, oil and meal and the amount of canola purchased by province of origin.

⁹ See Appendix G for a copy of the monthly and annual questionnaires.

¹⁰ See Appendix H for a copy of the questionnaire.

Stocks of canola include those held at crushing plants, in transit and at export positions owned by the reporting companies. Stocks of soybeans are at crushing plants only. No data are available on soybeans in-transit or at export positions; however, the volume of soybeans in such positions is considered to be negligible.

There are no automated edits due to the small number of questionnaires. The main edits are:

- Ensuring that the plant is still crushing the same oilseeds. Changes in plant activity are verified with the company since such changes are unusual.
- Ensuring that the extraction levels are within usual limits for the plant and the industry.
- Ensuring that the amount of oil and meal produced do not exceed the amount of oilseed produced. Currently, a tolerance of five per cent is allowed due to the addition of water, etc. during the production of canola meal.

Survey summary data are published in the Statistics Canada publication **Cereals and Oilseeds Review**. Data for sunflowerseed, flaxseed and soybeans and their products are confidential due to the small number of companies crushing these oilseeds.

4.0

DATA QUALITY

The majority of the data used by the Grain Marketing Unit are administrative data obtained from other areas within Statistics Canada or from other federal, provincial or international agencies. The reader is directed to methodological reports of these agencies for further information.¹¹

Most of the data for the major data series used by the Unit were produced with statistical purposes in mind; however, some such as the Western Grain Stabilization Program were designed for program administration with statistical purposes as a tertiary objective. Data from the Canadian Grain Commission were obtained as a secondary, but still important, aspect of their licensing, inspection and regulatory functions. Similarly, trade data are obtained by Revenue Canada during their customs and excise duty applications.

4.2 COVERAGE:

Coverage is complete. In instances where it is known that coverage by the original data source is not complete, an estimate is made for the missing data. For example, data on deliveries received from the Canadian Grain Commission relate only to licensed deliveries. An attempt is therefore made to estimate the unlicensed deliveries using a variety of other data sources.

4.3 REVISION POLICY:

Every attempt is made to keep the methods comparable over time. When this is not possible, an attempt is made to revise the methods used and the accompanying data back to the last Census of Agriculture year. The Census is conducted every five years in years ending in a 1 and a 6.

Revisions were made to the unlicensed delivery estimates in the late 1980's to standardize methods back to the 1986 census year. Major changes during the late 1980's and early 1990's affecting unlicensed marketing data were:

1. A lack of collection of quantity data on the 1987 Census of Manufactures;
2. A switch from Industrial Commodity Classification codes to Standard Classification of Goods codes for Survey of Manufactures data;
3. A switch from the Canadian International Trade Classification to the Harmonized System for trade data;
4. Availability of designated purchaser data from the Western Grain Stabilization Program; and
5. The changeover of the responsibility for the collection of data on Canadian exports to the United States from Revenue Canada to The U.S. Bureau of the Commerce.
6. An increase in the quantity of unlicensed grain exports to the United States.

¹¹ Particular reference should be made to Statistics Canada's **Field Crop Reporting Series-Data Sources and Estimation Procedures** and to The Canadian Grain Commission's **Corporate Services Division, Methodology Report**.

Revisions to source data series as a result of benchmarking to the last Census of Agriculture result in direct revisions to Grain Marketing's supply-disposition tables. Analysis of the changes may result in further indirect changes to balance sheet items. The major source series which undergoes intercensal revisions is **The Field Crop Reporting Series** which contains grain production and stocks.

Regular revisions are done to the supply-disposition tables during the production of the tables about five times per year. Major revisions normally occur as a result of:

1. new production or stock data;
2. annual revisions to import and export data by the International Trade Division of Statistics Canada; and
3. the release of final crop year data (visibles, deliveries, exports, domestic disappearance) by the Canadian Grain Commission.

Revisions to oilseed crushing survey data are made as received from the crushers and are released monthly in **The Cereal and Oilseeds Review**. These revisions are normally quite small. Canola meal production data were revised in 1990 back to 1986 to more accurately reflect the methods of production.

Revisions to milling data are made as received from the millers and are published monthly in **The Cereal and Oilseeds Review**. The collection of data at the end of the year from some small millers results in the major revision of the year.

4.4 CONFIDENTIALITY:

The Grain Marketing Unit follows the provisions of **The Statistics Act**. This Act provides that no data may be disclosed in a manner that would make it possible to relate the particulars obtained to any identifiable individual person, business or organization. Data on individual organizations are released only when these organizations have consented to such disclosure in writing to Statistics Canada.

Most data published by the Grain Marketing Unit are administrative in nature and have been previously published. The major exceptions to this previous release are data obtained from the **Report of Crushing Operations** or **The Millers Monthly Report** or analytical data obtained on an ad hoc basis such as the use of rye by distillers.

4.5 DATA LIMITATIONS:

Information on interprovincial movement of grain is limited. Some data are available from the Livestock Feed Bureau from their Feed Freight Assistance Program. Data on interprovincial canola movement are obtained from the **Report of Crushing Operations**.

Provincial grain delivery data published by the Canadian Grain Commission are representative of the province where the licensed facilities that received grain are located. The data are not representative of the province where the grain was grown or where the producers live.

It is known that some producers cross provincial borders to deliver their grain to elevators but no information is available on the quantities in question. The possibility of inter-provincial grain movement is considered during analysis.

No provincial breakdowns are available on quantities of grain delivered by grain dealers. The Canadian Grain Commission does estimate the breakdown; however, the percentage splits are considered weak. Canola is the commodity most affected by dealer activity.

The supply-disposition tables are split into three sections ending in December, March and July of each crop year. Grain marketings are normally slow around Christmas. This means that December 31 delivery data published by the Canadian Grain Commission quite closely approximate reality and can be easily used to help with the estimation of farm stocks. In March, movement through eastern ports can be heavy and it is suspected that published deliveries may lag behind actual movement by one or two weeks. When farm supply-disposition tables balance in December and in July but seem to be slightly off in March, the possibility of lagged data reporting for deliveries is considered.

Exports of the major grains are reported by The Canadian Grain Commission and by Statistics Canada. Export clearances reported by the Canadian Grain Commission include only exports that are made through licensed facilities. Unlicensed exports of Non-Board grains such as truck shipments of flaxseed or oats to the United States or export shipments of wheat and barley originating outside the Canadian Wheat Board area of Manitoba, Saskatchewan, Alberta and the Peace River District of British Columbia are excluded from Grain Commission data but are included in those reported by Statistics Canada.

The Grain Marketing Unit does a regular review of the two sources of grain export data. Attempts are made to reconcile the two series whenever possible while still considering the differences in methodology.

Historically, the Grain Marketing Unit used the export data produced by the Canadian Grain Commission for supply-disposition purposes due to the timely nature of the data. As well, unlicensed exports were historically very small or non-existent.

In recent years, the Unit has begun to use the Canadian Grain Commission export data for wheat and barley and Statistics Canada data for oats, rye, flaxseed and canola **for exports to the United States**. Canadian Grain Commission and Statistics Canada data for wheat and barley are quite closely aligned due to a regular reconciliation process with the Canadian Wheat Board which is responsible for all exports of western wheat and barley. However, the two data sources differ, sometimes significantly for the other major grains. The removal of oat marketing from the jurisdiction of the Canadian Wheat Board in the late 1980s resulted in new marketing methods and in large volumes of unlicensed oats moving to the United States. Further, the opening of several large canola crushing plants in the northern United States resulted in significant volumes of canola moving there. There have traditionally been some unlicensed exports of flaxseed and rye to the United States.

These exports to the United States are included in the Statistics Canada data but are excluded from the Canadian Grain Commission data.

5.0

DATA DISSEMINATION

5.1 PUBLICATIONS:

The Grain Marketing Unit produces two regular subscription publications.

1. The **Cereals and Oilseeds Review** (catalogue 22-007) is designed as a current monthly source of grain marketing data on the major grains produced in Canada. It contains monthly and year-to-date data as well as comparative historical information. The Review consists of eight sections: the situation report; concepts, methods and sources; wheat; coarse grains; oilseeds; international data; prices and specialty crops.

The situation report reviews Canadian and international grain markets for the month subsequent to the date of the publication; for example, the February situation report is contained in the January publication. This ensures that the information is always timely. The report analyzes published information and important market forces.

The second section presents an abbreviated version of the concepts, methods and sources used to produce the publication's tables.

The sections on wheat, coarse grains and oilseeds are relatively similar. These sections contain tables on the supply and disposition of grains at the national and farm levels, producer marketings and exports. There is also a table of selected statistics which is related to millings or crushings.

The section on international data and prices contains international supply-disposition tables, detailed wheat supply and disposition for the major exporting countries, international oilseed data for selected countries and cash grain prices and futures settlement prices, volumes and open interest in both Canada and the United States.

The section on specialty crops was added in 1994 and contains data on production and exports.

From time to time the publication contains supplemental data in additional tables; for example, the supply-disposition for malting barley.

2. The **Grain Trade of Canada** is designed as an annual historical reference for grain marketing data in Canada. It is produced in close cooperation with the Corporate Services Division of the Canadian Grain Commission. Normally, it is released in May following the end of the reference crop year.

The publication contains sections on concepts and definitions; highlights of the previous crop year; grain production data; national supply-disposition tables; cash and futures prices in both Canada and the United States; crop quality; domestic processing; crushings; product supply and disposition; shipments under feed freight assistance regulations; exports; the Canadian share of markets; grain storage and movement; grain storage capacity; and a map of the Prairie Provinces showing Census Agricultural Region(formerly crop district) boundaries. Occasionally, the publication contains feature articles.

5.2 OTHER METHODS OF DISSEMINATION:

The Grain Marketing Unit disseminates data by a variety of methods other than publications.

A major portion of the grain marketing data is disseminated directly in person, by telephone or by facsimile.

National supply-disposition tables are available on diskette.

Some¹² aggregated grain marketing data are available on CANSIM, Statistics Canada's machine-readable data base and retrieval system. CANSIM contains the most up-to-date data as well as historical data on national supply-disposition, export clearances, grain processing and producer deliveries.

It is the unit's policy to release data when they are ready, sometimes in advance of the actual publication release due to publication preparation time. The unit therefore encourages users to inquire about the most current information. A release schedule is available for the major data series.

¹² See Appendix I for a list of grain marketing data matrices on CANSIM.

APPENDIX A
THE FARM SUPPLY-DISPOSITION TABLE

| TRIFRMS
STATISTICS CANADA - STATISTIQUE CANADA
AGRICULTURE DIVISION - DIVISION DE L'AGRICULTURE | | | | | | | | | | | | | | | | | | | | | | | | FARM SUPPLY AND DISPOSITION
BILAN DANS LES FERMES | | | | | | | | | | | | UPDATED - DERNIÈRE MISE À JOUR: October 6, 1994 | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|------------------------------------------------------|------------------|------------------|-------------------|------|--|--|---------|--|--|--|--|-------------------------------------------------|---------|--|--|--|--|--|--|--|--|--|--|
| ALBERTA
FLAXSEED - GRAINE DE LIN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1988/89 | | | | | | 1989/90 | | | | | | 1990/91 | | | | | | 1991/92 | | | | | | 1992/93 | | | | | | 1993/94 | | | | | | 1994/95 | | | | | | | | | | |
| | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | | | | | | | | | | | | | | | | | | | | |
| OPENING STOCKS - STOCKS D'OUVERTURE | - | - | - | - | - | - | 5.0 | 5.0 | 5.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 5.0 | 5.0 | 5.0 | - | - | - | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | |
| PRODUCTION | 20.3 | 20.3 | 20.3 | 43.2 | 43.2 | 43.2 | 78.2 | 78.2 | 78.2 | 38.1 | 38.1 | 38.1 | 19.1 | 19.1 | 19.1 | 40.8 | 40.8 | 40.8 | 35.8 | 35.8 | 35.8 | 35.8 | 35.8 | 35.8 | 35.8 | 35.8 | 35.8 | 35.8 | | | | | | | | | | | | | | | | | | | |
| TOTAL SUPPLY - RESSOURCES TOTALES | 20.3 | 20.3 | 20.3 | 43.2 | 43.2 | 43.2 | 81.2 | 81.2 | 81.2 | 68.1 | 68.1 | 68.1 | 49.1 | 49.1 | 49.1 | 45.8 | 45.8 | 45.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MARKETINGS - LIVRAISONS DES PRODUCTEURS | 9.7 | 12.2 | 14.7 | 14.5 | 22.3 | 26.8 | 18.6 | 22.1 | 40.3 | 7.6 | 18.4 | 29.8 | 11.3 | 24.1 | 37.4 | 16.1 | 24.6 | 36.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEED - GRAINES DE SEMENCE | - | - | 1.5 | - | - | 2.4 | - | - | 1.3 | - | - | 0.8 | - | - | 1.1 | - | - | 1.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CARRYOVER - STOCKS À LA FERMETURE | 10.0 | 5.0 | - | 25.0 | 15.0 | 5.0 | 57.0 | 50.0 | 30.0 | 60.0 | 45.0 | 30.0 | 35.0 | 20.0 | 5.0 | 27.0 | 15.0 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FEED, WASTE & DOCKAGE - ALIMENTS POUR ANIMAUX,
DÉCHETS ET PERTES | 0.6 | 3.1 | 4.1 | 3.7 | 5.8 | 9.0 | 7.7 | 6.1 | 9.6 | 0.5 | 4.7 | 7.5 | 2.8 | 5.0 | 5.6 | 2.5 | 5.8 | 7.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL DISPOSITION - UTILISATIONS TOTALES | 20.3 | 20.3 | 20.3 | 43.2 | 43.2 | 43.2 | 81.2 | 81.2 | 81.2 | 68.1 | 68.1 | 68.1 | 49.1 | 49.1 | 49.1 | 45.8 | 45.8 | 45.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| TRIFRMS
STATISTICS CANADA - STATISTIQUE CANADA
AGRICULTURE DIVISION - DIVISION DE L'AGRICULTURE | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------|------------------|------------------|-------------------|------------------|-------------------|-------------------|------------------|------------------|-------------------|-------------------|------------------|-------------------|------------------|------------------|-------------------------------------------------|------------------|------------------|-------------------|------------------|-------------------|-------------------|------------------|------------------|-------------------|-------------------|
| FARM SUPPLY AND DISPOSITION
BILAN DANS LES FERMES | | | | | | | | | | | | | | | UPDATED - DERNIÈRE MISE À JOUR: October 6, 1994 | | | | | | | | | | |
| WESTERN CANADA - CANADA DE L'OUEST
FLAXSEED - GRAINE DE LIN | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1988/89 | | | | | | 1989/90 | | | 1990/91 | | | 1991/92 | | | 1992/93 | | | 1993/94 | | | 1994/95 | | | |
| | Aug.1-
Dec.31 | | Aug.1-
Mar.31 | | Aug.1-
July 31 | Aug.1-
Dec.31 | | Aug.1-
Mar.31 | | Aug.1-
July 31 | Aug.1-
Dec.31 | | Aug.1-
Mar.31 | | Aug.1-
July 31 | Aug.1-
Dec.31 | | Aug.1-
Mar.31 | | Aug.1-
July 31 | Aug.1-
Dec.31 | | Aug.1-
Mar.31 | | Aug.1-
July 31 |
| | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | |
| OPENING STOCKS - STOCKS D'OUVERTURE | 110.0 | 110.0 | 110.0 | 30.0 | 30.0 | 38.0 | 15.0 | 15.0 | 15.0 | 245.0 | 245.0 | 245.0 | 260.0 | 260.0 | 260.0 | 130.0 | 130.0 | 130.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | |
| PRODUCTION | 327.8 | 327.8 | 327.8 | 497.9 | 497.9 | 497.8 | 889.0 | 889.0 | 889.0 | 835.0 | 835.0 | 835.0 | 336.8 | 336.8 | 336.8 | 627.4 | 627.4 | 627.4 | 918.5 | 918.5 | 918.5 | 918.5 | 918.5 | 918.5 | |
| TOTAL SUPPLY - RESSOURCES TOTALES | 437.8 | 437.8 | 437.8 | 527.9 | 527.9 | 527.8 | 904.0 | 904.0 | 904.0 | 1080.0 | 1080.0 | 1080.0 | 596.8 | 596.8 | 596.8 | 757.4 | 757.4 | 757.4 | | | | | | | |
| MARKETINGS - LIVRAISONS DES PRODUCTEURS | 154.7 | 224.5 | 333.3 | 238.3 | 338.7 | 409.4 | 254.7 | 363.0 | 561.4 | 161.1 | 310.3 | 512.9 | 161.1 | 251.8 | 383.4 | 309.9 | 432.3 | 609.0 | | | | | | | |
| SEED - GRAINES DE SEMENCE | - | - | 26.3 | - | - | 30.4 | - | - | 22.0 | - | - | 13.1 | - | - | 23.1 | - | - | 31.8 | | | | | | | |
| CARRYOVER - STOCKS À LA FERMETURE | 255.0 | 165.0 | 30.0 | 235.0 | 125.0 | 18.0 | 607.0 | 489.0 | 245.0 | 705.0 | 500.0 | 280.0 | 365.0 | 305.0 | 130.6 | 412.0 | 265.0 | 45.0 | | | | | | | |
| FEED, WASTE & DOCKAGE - ALIMENTS POUR ANIMAUX,
DÉCHETS ET PERTES | 27.9 | 48.1 | 48.0 | 53.8 | 64.2 | 73.1 | 42.3 | 68.0 | 75.6 | 23.9 | 69.7 | 94.0 | 30.5 | 39.8 | 98.1 | 39.5 | 98.1 | 71.6 | | | | | | | |
| TOTAL DISPOSITION - UTILISATIONS TOTALES | 437.8 | 437.8 | 437.8 | 527.9 | 527.9 | 527.9 | 904.0 | 904.0 | 904.0 | 1080.0 | 1080.0 | 1080.0 | 596.8 | 596.8 | 596.8 | 757.4 | 757.4 | 757.4 | | | | | | | |

APPENDIX B

FREIGHT ASSISTED SHIPMENTS BY PROVINCE OF DESTINATION

The Feed Freight Assistance Program has its origins in the middle of the 1930's when various organizations forwarded requests for a federal program to assist feed grain transportation from the feed grain surplus regions of Canada into the feed grain deficit regions. By the late 1930's virtually all major farm organizations were in favour of such a program and it was implemented in 1941. At that time the three Prairie Provinces represented the feed grain surplus regions while each of the other six provinces were deficit in feed grains.

The initial impact of this program was to help to alleviate the surplus supply situation in the Prairies and to help to develop a livestock production base in the feed grain deficit regions of the country. Prairie grain producers thus found an additional outlet for their surplus feed grains. Livestock producers in the feed grain deficit regions found that Prairie feed grains were now available at competitive prices. In 1949, Newfoundland joined Confederation and became the seventh province eligible for feed freight assistance payments.

From 1941 through to 1966, the Feed Freight Assistance Program was subject to annual review by Parliament and expenditures under this program were subject to the annual approval of Parliament. In 1966, the Livestock Feed Assistance Act was passed. This Act, which created the Livestock Feed Board of Canada, also made the Feed Freight Assistance Program a statutory program. Some of the major revisions to the Act since that time, by year, have been:

- 1969: Ontario Corn became eligible for subsidized shipments into the Atlantic Provinces;
- 1971: Ontario Wheat became eligible for subsidized shipments into Quebec and the Atlantic Provinces;
- 1976: Ontario Corn shipments to Quebec became eligible for assistance; and at the same time Feed Freight Assistance was removed from most of Ontario and the St. Lawrence region of Quebec. Ontario was deemed to be mainly a feed surplus province;
- 1980: The Yukon and Northwest Territories were made eligible for Feed Freight Assistance payments;
- 1981: Ontario grown Barley shipped to the Atlantic Provinces became eligible for freight assistance;
- 1984: All domestic feed grains were made eligible for feed freight assistance payments if they were commercially marketed within the eligible deficit feed grain regions.
- 1992: Change from county rates to individual destination rates. Change rate categories from Eastern and Western produced grain for small grains and corn.

The current statistics show the quantity shipped under this program. As all parts of British Columbia, Atlantic Canada, and the Yukon and Northwest Territories are eligible for payments, the shipments into these regions can be considered to represent virtually all inward movement of domestically produced feed grains.

For Quebec, the St. Lawrence ports and the adjacent regions do not receive feed freight assistance on Western feed grains and an even greater region is ineligible for payments on Eastern produced grain. Thus the Quebec statistics show a large proportion but not all of the total receipts of Western grain by Quebec livestock feeders. The shipments of Ontario corn into the eligible regions of Quebec represent less than half of the total consumption of Ontario corn in the Province of Quebec.

For Ontario, since 1976 only the Northern regions of the province have been eligible for freight assistance payments. Thus although the data show the total freight assisted shipments into the Province of Ontario, this is only a fraction of the total shipments.

To summarize, the statistics for the Yukon and the Northwest Territories, British Columbia and Atlantic Canada represent total shipments of Canadian feed grain into those regions. The Quebec statistics represent the majority of the shipments of Western produced grain into the region but only a small proportion of Ontario grain shipments. For Ontario, the program is only in effect in one region which accounts for only a fraction of total Ontario feed grain consumption.

Finally, these statistics are tabulated on a monthly basis as claims are received and paid. This procedure means that the monthly statistics are accredited slightly after the actual movement. For the large majority of claims the process is completed within one month of the actual movement. For analytical purposes, annual statistics are thus totally creditable as stated.

SOURCE: LIVESTOCK FEED BUREAU, POLICY BRANCH, AGRICULTURE AND AGRI-
FOOD CANADA

APPENDIX C
THE COMMERCIAL SUPPLY-DISPOSITION TABLE

IMBALANCE

16/11/94

| DURUM WHEAT
CROP YEAR 1993-94
'000 TONNES | | | | | | | |
|-------------------------------------------------|-------------------|------------|---------|-----------------|----------------------|-----------------------|----------------------|
| WEEK
NUMBER | STOCKS
JULY 31 | DELIVERIES | EXPORTS | DOMESTIC
USE | VISIBLES
WEEK END | APPARENT
IMBALANCE | CALCULATED
STOCKS |
| ONE/TWO | 973.0 | 1.6 | 99.7 | 4.6 | 945.7 | -75.4 | 870.3 |
| THREE | 973.0 | 9.9 | 186.4 | 7.0 | 869.1 | -79.6 | 789.5 |
| FOUR | 973.0 | 34.0 | 196.8 | 9.0 | 880.3 | -79.1 | 801.2 |
| FIVE | 973.0 | 69.2 | 267.7 | 13.3 | 848.5 | -87.3 | 761.2 |
| SIX | 973.0 | 91.1 | 333.8 | 15.2 | 814.7 | -99.6 | 715.1 |
| SEVEN | 973.0 | 119.0 | 399.5 | 20.6 | 756.0 | -84.1 | 671.9 |
| EIGHT | 973.0 | 151.7 | 452.3 | 25.8 | 718.2 | -71.6 | 646.6 |
| NINE | 973.0 | 211.1 | 539.5 | 33.3 | 684.9 | -73.6 | 611.3 |
| TEN | 973.0 | 351.1 | 586.9 | 39.6 | 801.1 | -103.5 | 697.6 |
| ELEVEN | 973.0 | 415.0 | 652.0 | 49.6 | 789.9 | -103.5 | 686.4 |
| TWELVE | 973.0 | 477.6 | 730.7 | 52.2 | 770.7 | -103.0 | 667.7 |
| THIRTEEN | 973.0 | 546.7 | 770.5 | 59.3 | 804.7 | -114.8 | 689.9 |
| FOURTEEN | 973.0 | 608.3 | 828.4 | 67.4 | 801.6 | -116.1 | 685.5 |
| FIFTEEN | 973.0 | 679.5 | 882.8 | 79.6 | 798.1 | -108.0 | 690.1 |
| SIXTEEN | 973.0 | 754.2 | 984.4 | 87.0 | 762.4 | -106.6 | 655.8 |
| SEVENTEEN | 973.0 | 796.5 | 1047.8 | 91.4 | 726.9 | -96.6 | 630.3 |
| EIGHTEEN | 973.0 | 965.6 | 1167.4 | 98.4 | 659.6 | 13.2 | 672.8 |
| NINETEEN | 973.0 | 975.3 | 1247.7 | 105.9 | 681.7 | -87.0 | 594.7 |
| TWENTY | 973.0 | 1096.7 | 1286.3 | 113.6 | 756.5 | -86.7 | 669.8 |
| TWENTY ONE/TWO | 973.0 | 1221.6 | 1420.9 | 136.9 | 741.9 | -105.1 | 636.8 |
| TWENTY THREE | 973.0 | 1242.5 | 1424.0 | 164.5 | 724.1 | -97.1 | 627.0 |
| TWENTY FOUR | 973.0 | 1277.4 | 1429.9 | 192.2 | 724.4 | -96.1 | 628.3 |
| TWENTY FIVE | 973.0 | 1328.3 | 1477.9 | 219.1 | 711.7 | -107.4 | 604.3 |
| TWENTY SIX | 973.0 | 1400.3 | 1547.7 | 247.7 | 700.6 | -122.7 | 577.9 |
| TWENTY SEVEN | 973.0 | 1454.9 | 1551.4 | 255.4 | 759.1 | -138.0 | 621.1 |
| TWENTY EIGHT | 973.0 | 1482.0 | 1577.6 | 267.5 | 762.7 | -152.8 | 609.9 |
| TWENTY NINE | 973.0 | 1524.7 | 1596.0 | 271.1 | 776.2 | -145.6 | 630.6 |
| THIRTY | 973.0 | 1544.1 | 1606.7 | 273.8 | 787.1 | -150.5 | 636.6 |
| THIRTY ONE | 973.0 | 1573.4 | 1607.4 | 281.6 | 800.6 | -143.2 | 657.4 |
| THIRTY TWO | 973.0 | 1635.7 | 1661.6 | 291.3 | 800.6 | -144.8 | 655.8 |
| THIRTY THREE | 973.0 | 1684.7 | 1701.7 | 298.1 | 802.7 | -144.8 | 657.9 |
| THIRTY FOUR | 973.0 | 1724.6 | 1728.5 | 303.3 | 798.2 | -132.4 | 665.8 |
| THIRTY FIVE | 973.0 | 1764.8 | 1766.7 | 306.6 | 796.9 | -132.4 | 664.5 |
| THIRTY SIX | 973.0 | 1801.0 | 1779.9 | 310.4 | 830.6 | -146.9 | 683.7 |
| THIRTY SEVEN | 973.0 | 1872.2 | 1825.1 | 319.2 | 862.5 | -161.6 | 700.9 |
| THIRTY EIGHT | 973.0 | 1944.5 | 1893.3 | 327.8 | 841.2 | -144.8 | 696.4 |
| THIRTY NINE | 973.0 | 2008.7 | 1945.5 | 332.7 | 860.9 | -157.4 | 703.5 |
| FORTY | 973.0 | 2066.7 | 1991.1 | 342.3 | 844.8 | -138.5 | 706.3 |
| FORTY-ONE | 973.0 | 2125.5 | 2079.7 | 344.6 | 812.4 | -138.2 | 674.2 |
| FORTY-TWO | 973.0 | 2187.0 | 2155.0 | 353.5 | 798.0 | -146.5 | 651.5 |
| FORTY-THREE | 973.0 | 2269.1 | 2220.0 | 356.0 | 826.6 | -160.5 | 666.1 |
| FORTY-FOUR | 973.0 | 2367.3 | 2289.1 | 365.6 | 846.8 | -161.2 | 685.6 |
| FORTY-FIVE | 973.0 | 2482.0 | 2344.8 | 373.4 | 883.8 | -147.0 | 736.8 |
| FORTY-SIX | 973.0 | 2590.8 | 2446.5 | 376.9 | 887.2 | -146.8 | 740.4 |
| FORTY-SEVEN | 973.0 | 2696.3 | 2545.1 | 366.5 | 901.6 | -143.9 | 757.7 |
| FORTY-EIGHT | 973.0 | 2793.5 | 2555.3 | 372.4 | 977.6 | -138.8 | 838.8 |
| FORTY-NINE | 973.0 | 2924.8 | 2587.7 | 306.9 | 1070.4 | -67.2 | 1003.2 |
| FIFTY | 973.0 | 3031.2 | 2679.1 | 311.8 | 1080.3 | -67.0 | 1013.3 |
| FIFTY-ONE | 973.0 | 3139.9 | 2699.4 | 281.8 | 1162.2 | -30.5 | 1131.7 |
| FIFTY-TWO | 973.0 | 3264.6 | 2782.8 | 284.0 | 1217.9 | -47.1 | 1170.8 |

| OATS - AVOINE | '000 Metric tonnes - Tonnes Métriques | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------------|---------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 1987/88 | | | 1988/89 | | | 1989/90 | | | 1990/91 | | | 1991/92 | | | 1992/93 | | | 1993/94 | | | | | |
| | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 | Aug. 1-
Dec. 31 | Aug. 1-
Mar. 31 | Aug. 1-
July 31 |
| BEGINNING STOCKS - STOCKS D'OUVERTURE: | | | | | | | | | | | | | | | | | | | | | | | | |
| ON FARMS - DANS LES FERMES: | 848.0 | 848.0 | 848.0 | 780.0 | 780.0 | 780.0 | 483.0 | 483.0 | 483.0 | 788.0 | 788.0 | 788.0 | 788.0 | 788.0 | 788.0 | 453.0 | 453.0 | 453.0 | 888.0 | 888.0 | 888.0 | | | |
| COMMERCIAL POSITIONS - POSITIONS COMMERCIALES: | 144.1 | 144.1 | 144.1 | 207.3 | 207.3 | 207.3 | 270.8 | 270.8 | 270.8 | 173.5 | 173.5 | 173.5 | 180.4 | 180.4 | 180.4 | 89.3 | 89.3 | 89.3 | 133.9 | 133.9 | 133.9 | | | |
| TOTAL - TOTAL: | 1032.1 | 1032.1 | 1032.1 | 987.3 | 987.3 | 987.3 | 653.8 | 653.8 | 653.8 | 935.5 | 935.5 | 935.5 | 945.4 | 945.4 | 945.4 | 542.3 | 542.3 | 542.3 | 606.9 | 606.9 | 606.9 | | | |
| PRODUCTION: | 2957.2 | 2957.2 | 2957.2 | 2941.7 | 2941.7 | 2941.7 | 3265.0 | 3265.0 | 3265.0 | 2992.2 | 2992.2 | 2992.2 | 1793.8 | 1793.8 | 1793.8 | 2623.1 | 2623.1 | 2623.1 | 3615.2 | 3615.2 | 3615.2 | | | |
| IMPORTS - IMPORTATIONS: | - | - | - | - | - | - | - | - | - | 1.3 | 1.7 | 2.8 | 0.5 | 1.0 | 2.1 | 1.5 | 2.0 | 3.0 | 1.1 | 1.3 | 1.9 | | | |
| TOTAL SUPPLIES - RESSOURCES TOTALES: | 3989.3 | 3989.3 | 3989.3 | 3909.0 | 3909.0 | 3909.0 | 3658.8 | 3658.8 | 3658.8 | 3629.0 | 3629.4 | 3630.5 | 2739.8 | 2740.3 | 2741.4 | 3366.9 | 3367.4 | 3368.4 | 4305.2 | 4306.4 | 4306.0 | | | |
| EXPORTS - EXPORTATIONS: | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAIN - CÉRÉALES: | 108.7 | 148.4 | 280.8 | 208.8 | 448.8 | 708.8 | 325.8 | 485.1 | 700.7 | 218.2 | 267.9 | 368.7 | 188.8 | 220.1 | 323.4 | 331.8 | 467.2 | 722.4 | 628.0 | 748.5 | 1130.7 | | | |
| PRODUCTS - PRODUITS: | 1.2 | 2.8 | 5.7 | 5.4 | 11.3 | 18.9 | 5.1 | 7.4 | 8.3 | 3.8 | 5.0 | 11.7 | 7.0 | 12.7 | 27.1 | 18.2 | 34.0 | 53.2 | 27.5 | 42.1 | 82.2 | | | |
| TOTAL EXPORTS - EXPORTATIONS TOTALES(2): | 110.9 | 151.2 | 286.5 | 214.3 | 460.1 | 727.7 | 330.9 | 492.5 | 709.0 | 222.0 | 272.9 | 380.4 | 195.8 | 232.8 | 350.5 | 350.0 | 501.2 | 775.6 | 655.5 | 790.6 | 1212.9 | | | |
| DOMESTIC DISAPPEARANCE - DISPARITION INTÉRIEURE: | | | | | | | | | | | | | | | | | | | | | | | | |
| HUMAN FOOD - ALIMENTS POUR HUMAINS: | 37.1 | 57.7 | 75.3 | 41.7 | 89.8 | 85.4 | 43.1 | 88.2 | 90.8 | 32.5 | 48.8 | 70.0 | 32.7 | 52.8 | 85.1 | 55.0 | 82.1 | 114.4 | 51.3 | 80.7 | 113.7 | | | |
| SEED REQUIREMENTS - BESOINS EN SEMENCE: | - | - | 150.8 | - | - | 150.8 | - | - | 127.1 | - | - | 103.8 | - | - | 138.4 | - | - | 143.5 | - | - | 152.8 | | | |
| INDUSTRIAL USE - USAGE INDUSTRIEL: | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| LOSS IN HANDING - PERTES DUES À LA MANUTENTION: | 2.2 | 3.5 | 5.2 | 0.2 | 0.3 | 0.5 | 0.3 | 0.5 | 0.8 | - | - | - | 0.5 | 0.8 | 1.3 | 1.5 | 2.5 | 3.7 | 1.5 | 2.5 | 3.7 | | | |
| FEED, WASTE AND DOCKAGE - | | | | | | | | | | | | | | | | | | | | | | | | |
| ALIMENT POUR ANIMAUX, PERTES ET DÉCHETS(1): | 1365.8 | 2185.8 | 2505.3 | 1243.8 | 1808.3 | 2232.1 | 1053.7 | 1660.7 | 2094.4 | 1093.7 | 1654.8 | 2129.9 | 838.0 | 1413.8 | 1842.8 | 1048.3 | 1455.4 | 1842.3 | 1112.3 | 1619.8 | 1935.8 | | | |
| TOTAL - TOTALE: | 1404.9 | 2226.8 | 2735.8 | 1265.8 | 1879.5 | 2487.6 | 1097.1 | 1727.4 | 2313.1 | 1128.2 | 1703.4 | 2303.7 | 908.2 | 1487.6 | 1848.8 | 1104.8 | 1540.0 | 1903.9 | 1185.1 | 1702.6 | 2205.8 | | | |
| ENDING STOCKS - STOCKS À LA FERMETURE: | | | | | | | | | | | | | | | | | | | | | | | | |
| ON FARMS - DANS LES FERMES: | 2310.0 | 1420.0 | 780.0 | 2150.0 | 1305.0 | 423.0 | 2310.0 | 1525.0 | 782.0 | 2170.0 | 1520.0 | 795.0 | 1500.0 | 918.0 | 453.0 | 1780.0 | 1172.0 | 555.0 | 2284.0 | 1551.0 | 755.0 | | | |
| COMMERCIAL POSITIONS - POSITIONS COMMERCIALES: | 163.5 | 190.2 | 207.3 | 257.8 | 289.3 | 270.8 | 220.8 | 233.7 | 173.5 | 112.1 | 113.1 | 150.4 | 84.8 | 123.8 | 89.3 | 151.1 | 154.2 | 133.9 | 202.8 | 261.0 | 152.3 | | | |
| TOTAL - TOTAL: | 2473.5 | 1810.2 | 987.3 | 2407.8 | 1574.3 | 693.8 | 2530.8 | 1758.7 | 935.5 | 2282.7 | 1633.1 | 945.4 | 1584.8 | 1041.8 | 542.3 | 1931.1 | 1326.2 | 688.9 | 2486.8 | 1812.0 | 907.3 | | | |
| TOTAL DISPOSITION - UTILISATIONS TOTALES: | 3989.3 | 3989.3 | 3989.3 | 3909.0 | 3909.0 | 3909.0 | 3658.8 | 3658.8 | 3658.8 | 3629.0 | 3629.4 | 3630.5 | 2739.8 | 2740.3 | 2741.4 | 3366.9 | 3367.4 | 3368.4 | 4305.2 | 4306.4 | 4306.0 | | | |

NOTES: 1. FEED, WASTE AND DOCKAGE CALCULATED RESIDUALLY - LES ALIMENTS, LES PERTES ET LES DÉCHETS SONT CALCULÉS DE FAÇON RÉSIDUELLE; 2. GRAIN EXPORTS AND IMPORTS INCLUDE SEED - LES EXPORTATIONS ET IMPORTATIONS COMPRENNENT LA SEMENCE

APPENDIX E
THE CORN SUPPLY-DISPOSITION TABLE

| STATISTICS CANADA - STATISTIQUE CANADA
AGRICULTURE DIVISION - DIVISION DE L'AGRICULTURE
CANADA TOTAL | | | | SUPPLY AND DISPOSITION OF MAJOR GRAINS IN CANADA
BILAN DES PRINCIPALES CÉRÉALES AU CANADA | | | | | | | | | | | | UPDATED - DERNIÈRE MISE À JOUR: September 7, 1994 | | | | | | | | | | | |
|------------------------------------------------------------------------------------------------------------|------------------|------------------|-------------------|----------------------------------------------------------------------------------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|---------------------------------------------------|------------------|-------------------|------------------|------------------|-------------------|--|--|--|--|--|--|
| | | | | '000 Metric tonnes - Tonnes Métriques | | | | | | | | | | | | | | | | | | | | | | | |
| CORN - MAÏS | 1987/88 | | | 1988/89 | | | 1989/90 | | | 1990/91 | | | 1991/92 | | | 1992/93 | | | 1993/94 | | | | | | | | |
| | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | Aug.1-
Dec.31 | Aug.1-
Mar.31 | Aug.1-
July 31 | | | | | | |
| BEGINNING STOCKS - STOCKS D'OUVERTURE: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON FARMS - DANS LES FERMES..... | 780.0 | 780.0 | 780.0 | 780.0 | 780.0 | 780.0 | 880.0 | 880.0 | 880.0 | 830.0 | 830.0 | 830.0 | 1020.0 | 1020.0 | 1020.0 | 1088.0 | 1088.0 | 1088.0 | 825.0 | 825.0 | 825.0 | | | | | | |
| COMMERCIAL POSITIONS - POSITIONS COMMERCIALES..... | 369.7 | 369.7 | 369.7 | 801.8 | 801.8 | 801.8 | 381.8 | 381.8 | 381.8 | 328.8 | 328.8 | 328.8 | 514.3 | 514.3 | 514.3 | 484.7 | 484.7 | 484.7 | 424.8 | 424.8 | 424.8 | | | | | | |
| TOTAL - TOTAL..... | 1149.7 | 1149.7 | 1149.7 | 1581.8 | 1581.8 | 1581.8 | 1261.8 | 1261.8 | 1261.8 | 1158.8 | 1158.8 | 1158.8 | 1534.3 | 1534.3 | 1534.3 | 1519.7 | 1519.7 | 1519.7 | 1249.8 | 1249.8 | 1249.8 | | | | | | |
| PRODUCTION(1)..... | 7084.7 | 7084.7 | 7084.7 | 8449.8 | 8449.8 | 8449.8 | 8570.8 | 8570.8 | 8570.8 | 7086.8 | 7086.8 | 7086.8 | 7412.8 | 7412.8 | 7412.8 | 4882.8 | 4882.8 | 4882.8 | 6577.4 | 6577.4 | 6577.4 | | | | | | |
| TOTAL IMPORTS - IMPORTATIONS TOTALES(2)..... | 148.5 | 178.5 | 218.9 | 388.3 | 585.1 | 888.2 | 278.3 | 354.8 | 567.8 | 367.4 | 424.2 | 504.4 | 78.3 | 118.8 | 197.5 | 836.8 | 985.2 | 1238.0 | 172.7 | 230.2 | 532.0 | | | | | | |
| TOTAL SUPPLIES - RESSOURCES TOTALES..... | 8382.9 | 8418.9 | 8453.3 | 7089.8 | 7286.4 | 7889.5 | 7770.8 | 7847.4 | 8080.3 | 8382.8 | 8449.4 | 8529.6 | 8025.1 | 8083.4 | 8144.3 | 7038.1 | 7387.5 | 7841.3 | 7989.7 | 8057.2 | 8358.0 | | | | | | |
| EXPORTS - EXPORTATIONS(2)..... | 254.0 | 288.0 | 408.8 | 17.2 | 29.2 | 29.8 | 5.0 | 21.8 | 23.7 | 88.8 | 80.8 | 123.7 | 881.2 | 771.8 | 888.3 | 81.5 | 118.3 | 183.8 | 245.0 | 403.2 | 515.0 | | | | | | |
| DOMESTIC DISAPPEARANCE - DISPARITION INTÉRIEURE: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HUMAN FOOD and INDUSTRIAL USE - ALIMENTS POUR HUMAINS et USAGE INDUSTRIEL..... | 487.8 | 788.3 | 1213.3 | 505.8 | 837.3 | 1270.8 | 548.8 | 883.8 | 1301.4 | 522.8 | 825.8 | 1249.5 | 527.7 | 850.8 | 1273.8 | 854.0 | 881.0 | 1348.8 | 824.7 | 887.8 | 1371.0 | | | | | | |
| SEED REQUIREMENTS - BESOINS EN SEMENCE..... | - | - | 22.5 | - | - | 23.0 | - | - | 24.0 | - | - | 24.8 | - | - | 24.8 | - | - | 23.5 | - | - | 22.8 | | | | | | |
| FEED, WASTE & DOCKAGE - ALIMENTS POUR ANIMAUX, DÉCHETS ET PERTES(1)..... | 1953.8 | 3730.2 | 5557.1 | 1787.0 | 3570.4 | 5444.2 | 1988.4 | 4030.5 | 5752.8 | 1737.3 | 3872.2 | 5587.2 | 1829.0 | 3831.8 | 5340.0 | 1840.4 | 3312.8 | 4837.7 | 2105.3 | 3585.8 | 5318.3 | | | | | | |
| TOTAL - TOTALE..... | 2441.4 | 4528.5 | 8792.8 | 2292.8 | 4407.7 | 8738.1 | 2518.3 | 4924.1 | 7078.0 | 2258.8 | 4888.1 | 8871.8 | 2358.7 | 4782.7 | 8838.3 | 2384.4 | 4183.8 | 8207.8 | 2730.0 | 4563.8 | 8711.8 | | | | | | |
| ENDING STOCKS - STOCKS À LA FERMETURE: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON FARMS - DANS LES FERMES..... | 4000.0 | 2480.9 | 780.0 | 3800.0 | 3080.0 | 880.0 | 3780.9 | 3080.0 | 830.0 | 4300.0 | 2800.0 | 1020.0 | 4378.0 | 2428.0 | 1088.0 | 3330.0 | 3080.0 | 828.8 | 3429.0 | 2118.0 | 700.0 | | | | | | |
| COMMERCIAL POSITIONS - POSITIONS COMMERCIALES..... | 1887.5 | 1184.4 | 501.8 | 1258.8 | 808.5 | 381.8 | 1488.8 | 851.8 | 328.8 | 1733.8 | 1180.5 | 514.3 | 1832.2 | 1083.8 | 484.7 | 1222.2 | 885.8 | 424.8 | 1585.7 | 875.2 | 432.1 | | | | | | |
| TOTAL - TOTAL..... | 5887.5 | 3665.4 | 1281.8 | 5058.8 | 3888.5 | 1261.8 | 5218.8 | 3931.8 | 1158.8 | 6033.8 | 3980.5 | 1534.3 | 6210.2 | 3511.8 | 1512.7 | 4552.2 | 3965.8 | 1248.8 | 5014.7 | 3093.2 | 1132.1 | | | | | | |
| TOTAL DISPOSITION - UTILISATIONS TOTALES..... | 8382.9 | 8418.9 | 8453.3 | 7089.8 | 7286.4 | 7889.5 | 7770.8 | 7847.4 | 8080.3 | 8382.8 | 8449.4 | 8529.6 | 8025.1 | 8083.4 | 8144.3 | 7038.1 | 7387.5 | 7841.3 | 7989.7 | 8057.2 | 8358.0 | | | | | | |

NOTES: 1. FEED, WASTE AND DOCKAGE CALCULATED RESIDUALLY - LES ALIMENTS, LES PERTES ET LES DÉCHETS SONT CALCULÉS DE FAÇON RÉSIDUELLE; 2. GRAIN EXPORTS EXCLUDE SEED/ GRAIN IMPORTS INCLUDE SEED - LES EXPORTATIONS NE COMPRENNENT PAS LA SEMENCE/LES IMPORTATIONS COMPRENNENT LA SEMENCE; 3. 1992 PRODUCTION IS ON A NET BASIS - LA PRODUCTION DE 1992 EST NETTE.

APPENDIX F GRAIN PRODUCTS, SUPPLY-DISPOSITION TABLES

PRODUCT SUPPLY AND DISPOSITION - BILAN DES PRODUITS

Supply and Disposition of Wheat Flour by Crop Year

Bilan de la farine de blé selon la campagne agricole

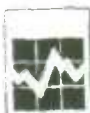
| | 1987-88r | 1988-89r | 1989-90r | 1990-91r | 1991-92 |
|----------------------------------------------------|-----------------------------|-----------|-----------|-----------|-----------|
| | metric - tonnes - métriques | | | | |
| Beginning Stocks -
Stocks d'ouverture | 35,806 | 39,123 | 37,667 | 29,780 | 35,887 |
| Production | 1,801,235 | 1,860,755 | 1,783,081 | 1,801,283 | 1,771,318 |
| SUPPLIES - TOTAL - RESSOURCES | 1,837,043 | 1,899,878 | 1,820,748 | 1,831,063 | 1,807,205 |
| Exports(1) - Exportations(1) | 342,378 | 291,453 | 169,980 | 218,757 | 234,955 |
| Ending Stocks - Stocks de
Fermeture | 39,123 | 37,667 | 29,780 | 35,887 | 25,842 |
| Domestic disappearance -
Disparition intérieure | 1,455,542 | 1,570,758 | 1,620,988 | 1,576,419 | 1,546,408 |
| DISPOSITION - TOTAL - UTILISATIONS | 1,837,043 | 1,899,878 | 1,820,748 | 1,831,063 | 1,807,205 |
| (1) Grain equivalent | | | | | |
| (1) Equivalent céréales | | | | | |

Supply and Disposition of Malt Barley by Crop Year

Bilan de l'orge de brasserie selon la campagne agricole

| | 1987-88r | 1988-89r | 1989-90r | 1990-91r | 1991-92 |
|----------------------------------------------------------------------------------|-----------------------------------------|----------|----------|----------|---------|
| | metric tonnes - '000 - tonnes métriques | | | | |
| Producers' deliveries -
Livraisons des producteurs | 1,166 | 1,074 | 843 | 1,455 | 1,684 |
| Grain Exports -
Exportations de grains | 498 | 325 | 181 | 637 | 935 |
| Malt Exports(1) - Exportations de malt(1) | 228 | 223 | 267 | 287 | 344 |
| EXPORTS - TOTAL - EXPORTATIONS | 726 | 548 | 448 | 924 | 1,279 |
| Brewer and distiller use -
Consommation des brasseries et
des distilleries | 365 | 373 | 364 | 363 | 367 |
| Cleanout and Loss -
Tamisage et perte | 60 | 126 | 26 | 197 | 70 |
| Domestic Disappearance -
Disparition intérieure | 425 | 498 | 390 | 560 | 437 |
| Stock Change - Variation des stocks | 14 | 28 | 5 | (29) | (32) |
| DISPOSITION - TOTAL - UTILISATIONS | 1,166 | 1,074 | 843 | 1,455 | 1,684 |
| (1) Grain equivalent | | | | | |
| (1) Equivalent céréales | | | | | |

APPENDIX G
MILLERS' MONTHLY REPORT, QUESTIONNAIRES
MILLER'S MONTHLY REPORT



| | |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Confidential when completed
Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable business without the previous written consent of that business. The data reported on this questionnaire will be treated in confidence and used for statistical purposes only. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.</p> <p>Collected under the authority of the Statistics Act, Revised Statutes of Canada, 1985, Chapter S19</p> <p>This information is required to provide private industry, farmers and governments with accurate and timely milling data.</p> <p>Ontario: To reduce response burden and to ensure more uniform statistics, Statistics Canada has entered into an agreement under Section 12 of the Statistics Act with the Ontario Ministry of Agriculture and Food for the sharing of information from this survey. You may refuse to share your information with the Ontario Ministry of Agriculture and Food by writing to the Chief Statistician and returning your letter of objection along with the completed questionnaire in the enclosed return envelope.</p> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

REPORT FOR THE MONTH OF _____

INSTRUCTIONS: Return your completed questionnaire by facsimile to 613-951-3868 or by mail to Grain Marketing Unit, Agriculture Division, Statistics Canada, Ottawa K1A 0T6

Please indicate in the comments section any unusual events which may affect the data for this month such as maintenance or holiday shutdowns, strikes or other changes in operation.

Si vous préférez ce questionnaire en français, veuillez cocher ☐

| | | | |
|-------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Number of days mill operated this month | days | | |
| Flour mill capacity (24 hour day) | tonnes | | |
| WHEAT MILLED | | | |
| Wheat milled | Quantity milled | Stocks of wheat at month-end (Include wheat in mill bin and in unlicensed storage. Exclude wheat owned by your firm that is in licensed elevators.) | |
| | tonnes | tonnes | |
| CW Red Spring (include EXTSTRG and FEED) | | | |
| CW Red Winter | | | |
| CW Soft White Spring | | | |
| CW Amber Durum | | | |
| Canada Prairie Spring (Red or White) | | | |
| Ontario Wheat: Winter | | | |
| Spring | | | |
| Quebec Wheat: Spring | | | |
| Winter | | | |
| All Other Eastern Wheat (specify) | | | |
| TOTAL WHEAT | | | |
| WHEAT FLOUR | | | |
| Grade of flour | Quantity produced | Stocks of flour at month-end | |
| | | At the mill | Off-site, on consignment and in-transit |
| | tonnes | tonnes | tonnes |
| Spring No. 1 or top patent (including semolina) | | | |
| Spring No. 2 patent (including baker's) | | | |
| Spring No. 3 patent (including export patent) | | | |
| Whole wheat and graham flour | | | |
| Soft wheat flour | | | |
| Durum semolina and flour | | | |
| Lower grades of flour | | | |
| TOTAL FLOUR | | | |
| WHEAT OFFAL | | | |
| Description | Quantity produced | Stocks of millfeeds at month-end | |
| | | | |
| | tonnes | tonnes | |
| WHEAT MILLFEEDS | | | |

| COARSE GRAINS MILLED (Exclude grindings for animal feed) | | | | | |
|----------------------------------------------------------|-----------------|---------------|---------------|----------|-------------------------------------------------------------------------------------------------------------|
| Coarse Grains | Quantity Milled | | | | Stocks of coarse grains on July 31 in mill bin and unlicensed storage. Exclude grain in licensed elevators. |
| | Total | Eastern Grown | Western Grown | Imported | |
| | tonnes | tonnes | tonnes | tonnes | tonnes |
| Oats | | | | | |
| Barley | | | | | |
| Rye | | | | | |
| Corn | | | | | |
| Semi-processed grain i.e. oat groats (specify) _____ | | | | | |
| Other grain (specify) _____ | | | | | |

| COARSE GRAINS PRODUCTS | | |
|------------------------------------------------------------------------------------|-------------------|----------------------------------------------------|
| Coarse Grain Products for human use and offal | Quantity produced | Stocks of coarse grain products on hand on July 31 |
| | tonnes | tonnes |
| Oats: Oat Flour | | |
| Oatmeal | | |
| Rollt oats | | |
| Barley: Barley Flour | | |
| Barley Meal | | |
| Pot and pearl Barley | | |
| Rye: Rye Flour | | |
| Rye Meal | | |
| Corn: Corn Flour | | |
| Corn Meal | | |
| Corn Grits, all types | | |
| Corn hominy | | |
| Other (specify) _____ | | |
| TOTAL OFFAL (bran, hulls, etc.) produced when milling the coarse grain shown above | | |

We solemnly affirm that the figures given in this report are taken from our records and are correct.

Name of person to contact for further information: _____

Telephone number: () _____

Facsimile number: () _____

COMMENTS: *Please indicate any unusual events which may affect the data for the year you are reporting for such as maintenance or holiday shutdowns, strikes or other changes in operation.*

N.B. This schedule is to be returned in the enclosed envelope on or before mid-January.



MILLER'S ANNUAL REPORT



Confidential when completed

Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable business without the previous written consent of that business. The data reported on this questionnaire will be treated in confidence and used for statistical purposes only. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.

Collected under the authority of the Statistics Act / Revised Statutes of Canada 1985 Chapter S19

This information is required to provide private industry farmers and governments with accurate and timely milling data.

Ontario: To reduce response burden and to ensure more uniform statistics, Statistics Canada has entered into an agreement under Section 12 of the Statistics Act with the Ontario Ministry of Agriculture and Food for the sharing of information from this survey. You may refuse to share your information with the Ontario Ministry of Agriculture and Food by writing to the Chief Statistician and returning your letter of objection along with the completed questionnaire in the enclosed return envelope.

INSTRUCTIONS: Return your completed questionnaire by facsimile to 613-951-3868 or by mail to Grain Marketing Unit, Agriculture Division, Statistics Canada, Ottawa K1A 0T6.

Please indicate in the comments section any unusual events which may affect the data for the year you are reporting for such as maintenance or holiday shutdowns, strikes or other changes in operation.

Si vous préférez ce questionnaire en français, veuillez cocher ☐

August 1, 19 ____ to July 31, 19 ____

Number of days operated in year under report _____ days

Total flour mill capacity (24 hour day) _____ tonnes

WHEAT MILLED

| Wheat milled | Quantity milled
tonnes | Stocks of wheat on hand on July 31 (Include wheat in mill bin and in unlicensed storage. Exclude wheat owned by your firm that is in licensed elevators.)
tonnes |
|------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CW Red Spring (include EXTSTRG and FEED) | | |
| CW Red Winter | | |
| CW Soft White Spring | | |
| CW Amber Durum | | |
| Canada Prairie Spring (Red or White) | | |
| Ontario Wheat Winter | | |
| Spring | | |
| Quebec Wheat Spring | | |
| Winter | | |
| All Other Eastern Wheat (specify) _____ | | |
| TOTAL WHEAT | | |

WHEAT FLOUR

| Grade of flour | Quantity produced
tonnes | Stocks of flour on hand on July 31 | |
|-------------------------------------------------|-----------------------------|------------------------------------|---------------------------------------------------|
| | | At the mill
tonnes | Off-site, on consignment and in-transit
tonnes |
| Spring No. 1 or top patent (including semolina) | | | |
| Spring No. 2 patent (including baker's) | | | |
| Spring No. 3 patent (including export patent) | | | |
| Whole wheat and graham flour | | | |
| Soft wheat flour | | | |
| Durum semolina and flour | | | |
| Lower grades of flour | | | |
| TOTAL FLOUR | | | |

WHEAT OFFAL

| Description | Quantity produced
tonnes | Stocks of millfeeds on hand on July 31
tonnes |
|------------------------|-----------------------------|--------------------------------------------------|
| WHEAT MILLFEEDS | | |



REPORT FOR THE MONTH OF _____

COARSE GRAINS MILLED (Exclude grindings for animal feed)

| Coarse Grains | Quantity Milled | | | | Stocks of coarse grains at month-end in mill bin and unlicensed storage. Exclude grain in licensed elevators. |
|------------------------------------------------------|-----------------|---------------|---------------|----------|---------------------------------------------------------------------------------------------------------------|
| | Total | Eastern Grown | Western Grown | Imported | |
| | tonnes | tonnes | tonnes | tonnes | tonnes |
| Oats | | | | | |
| Barley | | | | | |
| Rye | | | | | |
| Corn | | | | | |
| Semi-processed grain i.e. oat groats (specify) | | | | | |
| Other grain (specify) | | | | | |

COARSE GRAINS PRODUCTS

| Coarse Grain Products for human use and offal | | Quantity produced | Stocks of coarse grain products at month-end |
|------------------------------------------------------------------------------------------|-----------------------------|-------------------|----------------------------------------------|
| | | tonnes | tonnes |
| Oats: | Oat Flour | | |
| | Oatmeal | | |
| | Rollled oats | | |
| Barley: | Barley Flour | | |
| | Barley Meal | | |
| | Pot and pearl Barley | | |
| Rye: | Rye Flour | | |
| | Rye Meal | | |
| Corn: | Corn Flour | | |
| | Corn Meal | | |
| | Corn Grits, all types | | |
| | Corn hominy | | |
| | Other (specify) | | |
| TOTAL OFFAL (bran, hulls, etc.) produced when milling the coarse grain shown above | | | |

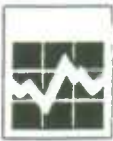
Name of person to contact for further information: _____

Telephone number: () _____

Facsimile number: () _____

COMMENTS: Please indicate any unusual events which may affect the data for this month such as maintenance or holiday shutdowns, strikes or other changes in operation.

APPENDIX H REPORT OF CRUSHING OPERATIONS, QUESTIONNAIRE REPORT OF CRUSHING OPERATIONS



Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable business/institution/individual without the previous written consent of that business/institution/individual. The data reported on this questionnaire will be treated in confidence and used for statistical purposes only. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.

Collected under the authority of the Statistics Act, Revised Statutes of Canada, 1985, Chapter S19.

This information is required to provide private industry, farmers and governments with accurate and timely crushing data.

Ontario: To reduce response burden and to ensure more uniform statistics, Statistics Canada has entered into an agreement under Section 12 of the Statistics Act with the Ontario Ministry of Agriculture for the sharing of information from this survey.

FOR THE MONTH OF

Instructions: 1. Please report quantities crushed on a cleaned basis.

2. Please retain one copy of this report for your file and return the other to Statistics Canada before the 10th day of the following month.

3. It would be appreciated if the report of crushing operations was forwarded each month by facsimile. The Agriculture Division facsimile number is: (613)951-3868. Please address the facsimile reports to the Grain Marketing Unit, Agriculture Division.

| Kind of oilseed | Raw material | | Oil | | Meal | |
|------------------|------------------|------------------|-------------------|------------------|-------------------|------------------|
| | Quantity crushed | Month-end stocks | Quantity Produced | Month-end stocks | Quantity Produced | Month-end stocks |
| | - tonnes - | | | | | |
| Flaxseed | | | | | | |
| Soybeans | | | | | | |
| Canola | | | | | | |
| Sunflower seed | | | | | | |
| Others (specify) | | | | | | |

Please report street receipts of canola direct from producers. **INCLUDE** receipts from any collection points that you may have but **EXCLUDE** grain received from licensed elevators.

Crop Year to date: August -

Man. _____ Sask. _____ Alberta _____ B.C. _____ Total _____

Month of:

Man. _____ Sask. _____ Alberta _____ B.C. _____ Total _____

APPENDIX I CANSIM MATRICES

Grain and Oilseeds Review (22-007), Monthly Exports Clearances of Major Grains by Final Destination, Monthly

| | |
|------------------|------|
| Wheat..... | 2650 |
| Durum Wheat..... | 2651 |
| Oats..... | 2652 |
| Barley..... | 2653 |
| Rye..... | 2654 |
| Flaxseed..... | 2655 |
| Rapeseed..... | 2656 |

| | |
|------------------------------------------------------------------|------|
| Custom Exports of Total Wheat Flour by Destination, Monthly..... | 5630 |
|------------------------------------------------------------------|------|

Custom Exports of Specified Processed Products by Final Destination, Monthly

| | |
|------------------------------------------------------------------------------------------------------|--------|
| Malt..... | 5612 |
| Wheat Flour..... | 5613 T |
| Production of Specified Processed Products for Canada, Oilseeds, Oil and Meal produced, Monthly..... | 5687 |
| Manufactured Food—Grain Products, Monthly..... | 183 T |

Producers' Deliveries of Major Grains for the Western Provinces, Monthly

| | |
|-----------------------|-----|
| British Columbia..... | 976 |
| All Prairies..... | 977 |
| Western Canada..... | 978 |
| Manitoba..... | 979 |
| Saskatchewan..... | 980 |
| Alberta..... | 981 |

Grain Trade in Canada, (22-201), Annual

Supply and Disposition Balance Tables, Canada, annual, by Crop Year beginning 1971-72 in Metric Tonne for:

| | |
|-----------------------------------|------|
| Wheat..... | 5679 |
| Durum Wheat..... | 5674 |
| Oats..... | 5680 |
| Barley..... | 5681 |
| Rye..... | 5682 |
| Flaxseed..... | 5683 |
| Rapeseed..... | 5684 |
| Wheat (excluding Durum)..... | 5685 |
| Corn, from 1976..... | 5688 |
| Stocks of Grain at July 31st..... | 5628 |
| Soybeans..... | 5629 |

Supply and Disposition Balance Tables, Canada, annual by crop years beginning 1933-34 to 1978-79 in bushels for:

| | |
|---------------|-------|
| Wheat..... | 942 T |
| Oats..... | 943 T |
| Barley..... | 944 T |
| Rye..... | 945 T |
| Flaxseed..... | 946 T |
| Rapeseed..... | 947 T |
| Corn..... | 948 T |

APPENDIX J HARMONIZED SYSTEM COMMODITY CODES

Harmonized System Commodity Codes

Codes des Marchandises du Système Harmonisé

| Grain or Product | H.S. Code | Grain or Product | H.S. Code |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------------------|
| Graine ou produits
des graines | Code du S.H. | Graine ou produits
des graines | Code du S.H. |
| Exports | Exportations | Exports – Concluded | Exportations – Fir |
| Barley – Orge | 10030000 | Canola Oil – Huile de canola | 15141010
15149010 |
| Corn – Maïs | 10051000
10059000 | Canola Meal – Tourteaux de canola | 23064000 |
| Oats – Avoine | 10040010
10040020
10040090 | Flaxseed (linseed) – Lin | 12040010
12040020
12040090 |
| Rye – Seigle | 10020000 | Linseed Oil – Huile de lin | 15151100
15151900 |
| Wheat – Blé | 10019005
10019011
10019013
10019015
10019019
10019020
10019030
10019060
10019090 | Linseed Meal – Tourteaux de lin | 23062000 |
| Durum Wheat – Blé dur | 10011010
10011090 | Soybeans – Soya | 12010010
12010020
12010090 |
| Barley Malt – Orge de Brasserie | 11071000
11072000 | Soybean Oil – Huile de soya | 15071000
15079000 |
| Oatmeal – Farine d'avoine | 11031200 | Soybean Meal – Tourteaux de soya | 23040000 |
| Rolled Oats – Flocons d'avoine | 11041200 | Imports | Importations |
| Wheat Flour – Farine de blé | 11010010
11010020
11010030
11010090 | Barley – Orge | 1003000010
1003000090 |
| Durum Semolina –
Blé dur et semoule | 11010020 | Rye – Seigle | 1002000000 |
| Bran shorts middlings –
Son gru rouge et gru blanc | 23023010 | Corn – Maïs | 0712902000
1005101000
1005109000
1005901000
1005909010 |
| Canola | 12050010
12050020
12050090 | Soybeans – Soya | 1201000010
1201000020
1201000090 |
| | | Rapeseed – Graine de colza | 1205000010
1205000020
1205000090 |

APPENDIX K CONVERSION FACTORS

Weights, Conversion Factors and Extraction Rates for Canadian Agricultural Products

Poids, facteurs de conversion et moyens proportionnelles d'extraction des produits agricoles canadiens

| | Weight and Yield
Poids et rendement
bushels per metric tonne
boisseaux par tonne métrique |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Wheat - Blé | 36.743711 |
| Oats - Avoine | 64.841840 |
| Barley - Orge | 45.929637 |
| Rye - Seigle | 39.368261 |
| Flaxseed - Lin | 39.368261 |
| Canola | 44.092451 |
| Corn - Maïs | 39.368261 |
| Soybeans - Graine de soya | 36.743711 |
| Sunflower Seed - Graine de tournesol | 73.487422 |
| Mustard Seed - Graine de moutarde | 44.092451 |
| Peas - Pois | 36.743711 |
| Buckwheat - Sarrasin | 45.929637 |
| Grain Equivalent(1) - Équivalent du grain(1): | |
| Wheat Flour - Farine de blé | 1.337268 |
| Oatmeal and Rolled Oats - Farine et de flocons d'avoine | 1.823051 |
| Barley Malt - Malt d'orge | 1.337945 |
| Rye Flour - Farine de seigle | 1.546255 |
| Linseed Oil - Huile de lin | 2.847855 |
| Linseed Meal - Tourteaux de lin | 1.677096 |
| Canola Oil - Huile de canola | 2.448294 |
| Canola Meal - Tourteaux de canola | 1.661927 |
| Soybean Oil - Huile de soya | 5.734043 |
| Soybean Meal - Tourteaux de soya | 1.299623 |
| Sunflower Oil - Huile de tournesol | 2.378498 |
| Sunflower Meal - Tourteaux de tournesol | 2.554275 |
| Extraction rates - Les moyens proportionnelles d'extraction: | |
| | percent
pourcentage |
| Wheat Flour - Farine de blé | 74.8 |
| Oatmeal and Rolled Oats - Farine et de flocons d'avoine | 54.9 |
| Barley Malt - Malt d'orge | 74.7 |
| Rye Flour - Farine de seigle | 64.7 |
| Linseed Oil - Huile de lin | 35.1 |
| Linseed Meal - Tourteaux de lin | 59.6 |
| Canola Oil - Huile de canola | 40.2 |
| Canola Meal - Tourteaux de canola | 60.2 |
| Soybean Oil - Huile de soya | 17.4 |
| Soybean Meal - Tourteaux de soya | 76.9 |
| Sunflower Oil - Huile de tournesol | 42.0 |
| Sunflower Meal - Tourteaux de tournesol | 39.2 |



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