Catalogue no. 22-002-X

Field Crop Reporting Series

Stocks of Canadian Grain at March 31, 2008

Statistics Canada Statistique Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website at *www.statcan.ca* or contact us by e-mail at *infostats@statcan.ca* or by phone from 8:30am to 4:30pm Monday to Friday at:

Toll-free telephone (Canada and the United States):
Inquiries line **1-800-263-1136**
National telecommunications device for the hearing impaired **1-800-363-7629**
Fax line **1-877-287-4369**
Depository Services Program inquiries line **1-800-635-7943**
Depository Services Program fax line **1-800-565-7757**

Statistics Canada national contact centre: 1-613-951-8116
Fax line **1-613-951-0581**

Information to access the product

This product, catalogue no. 22-002-X, is available for free in electronic format. To obtain a single issue, visit our website at *www.statcan.ca* and select Publications.

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed *standards of service* which its employees observe in serving its clients.

To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on *www.statcan.ca* under About us > Providing services to Canadians.

Statistics Canada
Agriculture Division

Field Crop Reporting Series

Stocks of Canadian Grain at March 31, 2008

Published by authority of the Minister responsible for Statistics Canada

May 2008

Catalogue no. 22-002-X, vol. 87, no. 3

ISSN 1488-9900

Frequency: Irregular

Ottawa

La version française de cette publication est disponible sur demande (nº 22-002-X au catalogue).

Note of appreciation

Canada owes the success of its statistical system to a long standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

User information

Symbols

The following standard symbols are used in Statistics Canada publications:

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published

Table of contents

Highlights

Stocks of Canadian grain at March 31, 2008

- With the exception of corn for grain and oats, total stocks of major grains and oilseeds, including commercial and on-farm inventories, had declined as of March 31, 2008, compared with the same date in 2007. These were also the only major field crops with current inventory levels above the five-year average.

Analysis

Stocks of Canadian grain at March 31, 2008

Except for corn for grain and oats, total stocks of major grains and oilseeds, including commercial and on-farm inventories, had declined as of March 31, 2008, compared with the same date in 2007, according to a survey of grain farmers and commercial grain holders.

Total corn for grain stocks were a record, and total oat storage levels remained well above the five-year average.

Stocks of wheat tumble

Total stocks of wheat excluding durum amounted to an estimated 8.8 million tonnes, down 4.0 million tonnes in March of 2007. The decline was mainly the result of a 25.3 % drop in production in 2007. Prairie on-farm stocks alone were down 36.6% to 5.6 million tonnes, well below the five-year average of 7.6 million tonnes.

Commercially held stocks and on-farm stocks in all Prairie provinces tumbled to levels below the five-year average.

Total stocks of durum wheat fell 35.2% to 2.1 million tonnes, an estimate below the five-year average of 3.8 million tonnes. Just two years ago, a record 5.2 million tonnes of durum was reported.

On-farm durum stock amounts in the Prairie provinces tumbled to levels not seen since 1989. On-farm stocks of durum were down in all Prairie provinces and in commercial positions to estimates dramatically below the five-year average.

Stocks of canola down

Total stocks of canola were 3.7 million tonnes, 22.2% below March 2007. On-farm stock levels in the Prairie provinces where the majority of Canadian canola is grown were all down. Total prairie province on-farm stocks of canola were 2.5 million tonnes, compared to the five-year average of 2.8 million tonnes. Lower production in 2007 and increased exports and record crushings led to the draw-down in total stocks.

Oats stocks rise

Total stocks of oats at the end of March were the highest since the year 2000, primarily due to very strong production levels in 2007. The total stock estimate for oats was 2.0 million tonnes, an increase of 30.3% from 2007 and substantially above the five-year average of 1.6 million tonnes.

Total stocks of barley down marginally

Total stocks of barley were down just 2.4% from March 2007 to 4.5 million tonnes. The five-year average is 5.4 million tonnes.

Stock levels remained unchanged in Manitoba, but declined in Saskatchewan and Alberta.

Record stocks of grain corn

Despite increasing demand for ethanol and for animal feed, record high supplies from imports and production have kept total stocks of grain corn at 6.0 million tonnes, 10.0% higher than March 2007. This level easily exceeds the previous record of 5.8 million tonnes set in 2006.

In Ontario, on-farm stocks of corn for grain rose 18.2% to a record 2.7 million tonnes, surpassing the record of 2.5 million tonnes set in March 2006. Quebec farmers reported a robust increase of 40.7% to 1.9 million tonnes.

Related products

Selected publications from Statistics Canada

21-206-X	Statistics on Income of Farm Operators
21-207-X	Statistics on Income of Farm Families
21-208-X	Statistics on Revenues and Expenses of Farms
22-003-X	Fruit and Vegetable Production
22-008-U	Canadian Potato Production - Updates
22-008-X	Canadian Potato Production
22F0005X	Crops Small Area Current Data
23-221-X	Production and Value of Honey and Maple Products
23-501-X	Livestock Feed Requirements Study
23-502-X	Alternative Livestock on Canadian Farms
96-325-X	Canadian Agriculture at a Glance
96-328-M	Canadian Agriculture at a Glance - Teacher's Kit

Selected CANSIM tables from Statistics Canada

001-0004	Estimated summerfallow areas, annual
001-0010	Estimated areas, yield, production and average farm price of principal field crops, in metric units, annual
001-0014	Area, production and farm value of potatoes, annual
001-0017	Estimated areas, yield, production, average farm price and total farm value of principal field crops, in imperial units, annual
001-0018	Estimated areas, yield, production, average farm price and total farm value of selected principal field crops: sugar beets, tame hay and fodder corn, in imperial units, annual
001-0019	Estimated area, yield, production, average farm price and total farm value of selected major speciality field crops, in imperial units, annual
001-0020	Estimated area, yield, production, average farm price and total farm value of selected principal field crops: dry beans (white and coloured), in imperial units, annual

001-0040	Stocks of grain and oilseeds at March 31, July 31 and December 31, 3 times per year
001-0041	Supply and disposition of grains in Canada as of March 31, July 31, August 31 (soybeans only) and December 31, 3 times per year
001-0042	Supply and disposition of corn in Canada and selected provinces as of March 31, August 31 and December 31, 3 times per year
001-0043	Farm supply and disposition of grains as of March 31, July 31, August 31 (soybeans only) and December 31, 3 times per year

Selected surveys from Statistics Canada

3401	Field Crop Reporting Series

Selected summary tables from Statistics Canada

- *Field and specialty crops*

Statistical tables

Table 1
Stocks of Canadian grain

	Crop-years		
	2005/2006	2006/2007	2007/2008
	thousands of metric tonnes		
All wheat			
December 31			
Stocks on farms	19,039	16,962	11,466
Commercial stocks	4,755	4,611	3,998
Total stocks	**23,794**	**21,573**	**15,464**
March 31			
Stocks on farms	13,871	11,263	6,932
Commercial stocks	4,722	4,714	3,893
Total stocks	**18,593**	**15,977**	**10,825**
July 31			
Stocks on farms	4,265	1,979	..
Commercial stocks	5,433	4,824	..
Total stocks	**9,698**	**6,803**	**..**
Wheat (excluding durum)			
December 31			
Stocks on farms	13,891	13,862	9,516
Commercial stocks	3,510	3,639	3,077
Total stocks	**17,401**	**17,501**	**12,593**
March 31			
Stocks on farms	9,871	9,113	5,812
Commercial stocks	3,515	3,689	2,954
Total stocks	**13,386**	**12,802**	**8,766**
July 31			
Stocks on farms	2,625	1,679	..
Commercial stocks	3,799	3,892	..
Total stocks	**6,424**	**5,571**	**..**
Durum wheat			
December 31			
Stocks on farms	5,148	3,100	1,950
Commercial stocks	1,245	972	921
Total stocks	**6,393**	**4,072**	**2,871**
March 31			
Stocks on farms	4,000	2,150	1,120
Commercial stocks	1,207	1,025	938
Total stocks	**5,207**	**3,175**	**2,058**
July 31			
Stocks on farms	1,640	300	..
Commercial stocks	1,633	933	..
Total stocks	**3,273**	**1,233**	**..**

Table 1 – continued

Stocks of Canadian grain

	Crop-years		
	2005/2006	2006/2007	2007/2008
	thousands of metric tonnes		
Oats			
December 31			
Stocks on farms	2,443	2,139	2,549
Commercial stocks	235	233	255
Total stocks	**2,678**	**2,372**	**2,803**
March 31			
Stocks on farms	1,604	1,317	1,710
Commercial stocks	234	231	307
Total stocks	**1,838**	**1,548**	**2,017**
July 31			
Stocks on farms	735	467	..
Commercial stocks	137	89	..
Total stocks	**872**	**556**	**..**
Barley			
December 31			
Stocks on farms	8,875	6,962	6,342
Commercial stocks	549	511	768
Total stocks	**9,424**	**7,473**	**7,110**
March 31			
Stocks on farms	6,118	4,061	3,810
Commercial stocks	352	511	650
Total stocks	**6,470**	**4,572**	**4,460**
July 31			
Stocks on farms	3,027	1,200	..
Commercial stocks	262	292	..
Total stocks	**3,289**	**1,492**	**..**
Rye			
December 31			
Stocks on farms	340	350	115
Commercial stocks	..	..	..
Total stocks	**..**	**..**	**..**
March 31			
Stocks on farms	275	225	65
Commercial stocks	..	..	..
Total stocks	**..**	**..**	**..**
July 31			
Stocks on farms	170	105	..
Commercial stocks	..	..	..
Total stocks	**..**	**..**	**..**

Table 1 – continued

Stocks of Canadian grain

	Crop-years		
	2005/2006	2006/2007	2007/2008
	thousands of metric tonnes		
Flaxseed			
December 31			
Stocks on farms	630	715	355
Commercial stocks	91	155	127
Total stocks	**721**	**870**	**482**
March 31			
Stocks on farms	530	550	185
Commercial stocks	96	186	157
Total stocks	**626**	**736**	**342**
July 31			
Stocks on farms	250	200	..
Commercial stocks	86	173	..
Total stocks	**336**	**373**	**..**
Canola			
December 31			
Stocks on farms	6,558	5,919	5,061
Commercial stocks	926	1,247	1,482
Total stocks	**7,484**	**7,166**	**6,543**
March 31			
Stocks on farms	4,105	3,833	2,468
Commercial stocks	1,031	922	1,231
Total stocks	**5,136**	**4,755**	**3,699**
July 31			
Stocks on farms	1,113	679	..
Commercial stocks	894	1,141	..
Total stocks	**2,007**	**1,820**	**..**
Corn for grain			
December 31			
Stocks on farms	6,555	6,237	7,675
Commercial stocks	1,908	2,128	1,871
Total stocks	**8,463**	**8,365**	**9,546**
March 31			
Stocks on farms	4,470	3,874	4,780
Commercial stocks	1,304	1,577	1,218
Total stocks	**5,774**	**5,451**	**5,998**
August 31			
Stocks on farms	1,580	850	..
Commercial stocks	421	493	..
Total stocks	**2,001**	**1,343**	**..**

Table 1 – continued

Stocks of Canadian grain

	Crop-years		
	2005/2006	2006/2007	2007/2008
	thousands of metric tonnes		
Soybeans			
December 31			
Stocks on farms	1,378	1,554	954
Commercial stocks	915	1,103	810
Total stocks	**2,293**	**2,657**	**1,764**
March 31			
Stocks on farms	1,021	1,016	390
Commercial stocks	650	870	550
Total stocks	**1,671**	**1,886**	**940**
August 31			
Stocks on farms	200	130	..
Commercial stocks	295	340	..
Total stocks	**495**	**470**	**..**
Dry peas			
December 31			
Stocks on farms	1,845	1,366	1,190
Commercial stocks	250	195	270
Total stocks	**2,095**	**1,561**	**1,460**
March 31			
Stocks on farms	1,200	750	545
Commercial stocks	340	260	275
Total stocks	**1,540**	**1,010**	**820**
July 31			
Stocks on farms	300	120	..
Commercial stocks	140	85	..
Total stocks	**440**	**205**	**..**
Lentils			
December 31			
Stocks on farms	925	655	330
Commercial stocks	40	45	35
Total stocks	**965**	**700**	**365**
March 31			
Stocks on farms	710	465	155
Commercial stocks	45	36	32
Total stocks	**755**	**501**	**187**
July 31			
Stocks on farms	445	115	..
Commercial stocks	30	24	..
Total stocks	**475**	**139**	**..**

Table 1 – continued

Stocks of Canadian grain

	Crop-years		
	2005/2006	2006/2007	2007/2008
	thousands of metric tonnes		
Mustard seed			
December 31			
Stocks on farms	253	190	70
Commercial stocks	43	29	40
Total stocks	**296**	**219**	**110**
March 31			
Stocks on farms	202	130	30
Commercial stocks	46	42	42
Total stocks	**248**	**172**	**72**
July 31			
Stocks on farms	150	55	..
Commercial stocks	40	36	..
Total stocks	**190**	**91**	**..**
Sunflower seeds			
December 31			
Stocks on farms	65	120	75
Commercial stocks	5	8	6
Total stocks	**70**	**128**	**81**
March 31			
Stocks on farms	50	75	30
Commercial stocks	7	6	8
Total stocks	**57**	**81**	**38**
July 31			
Stocks on farms	20	15	..
Commercial stocks	7	8	..
Total stocks	**27**	**23**	**..**
Canary seed			
December 31			
Stocks on farms	289	207	160
Commercial stocks	23	25	31
Total stocks	**312**	**232**	**191**
March 31			
Stocks on farms	239	164	110
Commercial stocks	26	34	37
Total stocks	**265**	**198**	**147**
July 31			
Stocks on farms	170	95	..
Commercial stocks	20	26	..
Total stocks	**190**	**121**	**..**

Table 1 – continued

Stocks of Canadian grain

	Crop-years		
	2005/2006	2006/2007	2007/2008
	thousands of metric tonnes		
Chick peas			
December 31			
Stocks on farms	70	85	160
Commercial stocks	12	18	15
Total stocks	**82**	**103**	**175**
March 31			
Stocks on farms	40	55	120
Commercial stocks	10	14	14
Total stocks	**50**	**69**	**134**
July 31			
Stocks on farms	10	5	..
Commercial stocks	3	5	..
Total stocks	**13**	**10**	**..**

Table 2
Farm stocks of grain for the 2007/2008 crop year

	All wheat	Wheat (excuding durum)	Durum wheat	Oats	Barley
	thousands of metric tonnes				
Canada					
December 31, 2007	11,466	9,516	1,950	2,549	6,342
March 31, 2008	**6,932**	**5,812**	**1,120**	**1,710**	**3,810**
July 31, 2008	..	..	..	..	..
Maritimes					
December 31, 2007	21	21	…	19	82
March 31, 2008	**7**	**7**	**…**	**5**	**35**
July 31, 2008	..	..	…	..	..
Quebec					
December 31, 2007	95	95	…	140	175
March 31, 2008	**50**	**50**	**…**	**80**	**110**
July 31, 2008	..	..	…	..	..
Ontario					
December 31, 2007	275	275	…	40	145
March 31, 2008	**120**	**120**	**…**	**20**	**90**
July 31, 2008	..	..	…	..	..
Eastern Canada					
December 31, 2007	391	391	…	199	402
March 31, 2008	**177**	**177**	**…**	**105**	**235**
July 31, 2008	..	..	…	..	..
Manitoba					
December 31, 2007	1,600	1,600	…	560	740
March 31, 2008	**900**	**900**	**…**	**325**	**500**
July 31, 2008	..	..	…	..	..
Saskatchewan					
December 31, 2007	4,950	3,400	1,550	1,200	2,000
March 31, 2008	**3,225**	**2,275**	**950**	**860**	**1,200**
July 31, 2008	..	..	..	..	..
Alberta					
December 31, 2007	4,500	4,100	400	560	3,200
March 31, 2008	**2,620**	**2,450**	**170**	**400**	**1,875**
July 31, 2008	..	..	..	..	..
British Columbia					
December 31, 2007	25	25	…	30	0
March 31, 2008	**10**	**10**	**…**	**20**	**0**
July 31, 2008	..	..	…	..	..
Western Canada					
December 31, 2007	11,075	9,125	1,950	2,350	5,940
March 31, 2008	**6,755**	**5,635**	**1,120**	**1,605**	**3,575**
July 31, 2008	..	..	..	..	..

Table 2 – continued

Farm stocks of grain for the 2007/2008 crop year

	Dry peas	Flaxseed	Canola	Corn for grain	Soybeans
	thousands of metric tonnes				
Canada					
December 31, 2007	1,190	355	5,061	7,675	954
March 31, 2008	**545**	**185**	**2,468**	**4,780**	**390**
July 31, 2008	..	..	..	..	..
Maritimes					
December 31, 2007	…	…	…	23	4
March 31, 2008	**…**	**…**	**…**	**7**	**1**
July 31, 2008	…	…	…	..	..
Quebec					
December 31, 2007	…	…	6	3,075	150
March 31, 2008	**…**	**…**	**1**	**1,900**	**65**
July 31, 2008	…	…	..	..	..
Ontario					
December 31, 2007	…	…	8	4,200	700
March 31, 2008	**…**	**…**	**2**	**2,660**	**270**
July 31, 2008	…	…	..	..	..
Eastern Canada					
December 31, 2007	…	…	14	7,298	854
March 31, 2008	**…**	**…**	**3**	**4,567**	**336**
July 31, 2008	…	…	..	..	..
Manitoba					
December 31, 2007	30	60	875	360	100
March 31, 2008	**20**	**40**	**400**	**200**	**54**
July 31, 2008	..	..	..	..	..
Saskatchewan					
December 31, 2007	950	275	2,275	…	…
March 31, 2008	**430**	**135**	**1,190**	**…**	**…**
July 31, 2008	..	..	..	…	…
Alberta					
December 31, 2007	210	20	1,890	17	…
March 31, 2008	**95**	**10**	**875**	**13**	**…**
July 31, 2008	..	..	..	..	…
British Columbia					
December 31, 2007	…	…	7	…	…
March 31, 2008	**…**	**…**	**0**	**…**	**…**
July 31, 2008	…	…	..	…	…
Western Canada					
December 31, 2007	1,190	355	5,047	377	100
March 31, 2008	**545**	**185**	**2,465**	**213**	**54**
July 31, 2008	..	..	..	..	..

Table 3

Farm stocks of grain for the 2006/2007 crop year

	All wheat	Wheat (excluding durum)	Durum wheat	Oats	Barley
	thousands of metric tonnes				
Canada					
December 31, 2006	16,962	13,862	3,100	2,139	6,962
March 31, 2007	**11,263**	**9,113**	**2,150**	**1,317**	**4,061**
July 31, 2007	1,979	1,679	300	467	1,200
Maritimes					
December 31, 2006	22	22	…	17	60
March 31, 2007	**10**	**10**	**…**	**7**	**35**
July 31, 2007	0	0	…	0	0
Quebec					
December 31, 2006	85	85	…	150	200
March 31, 2007	**50**	**50**	**…**	**80**	**120**
July 31, 2007	8	8	…	30	40
Ontario					
December 31, 2006	385	385	…	65	225
March 31, 2007	**175**	**175**	**…**	**40**	**150**
July 31, 2007	60	60	…	15	90
Eastern Canada					
December 31, 2006	492	492	…	232	485
March 31, 2007	**235**	**235**	**…**	**127**	**305**
July 31, 2007	68	68	…	45	130
Manitoba					
December 31, 2006	2,225	2,225	…	435	775
March 31, 2007	**1,425**	**1,425**	**…**	**220**	**500**
July 31, 2007	210	210	…	55	170
Saskatchewan					
December 31, 2006	8,295	5,950	2,345	850	2,350
March 31, 2007	**5,670**	**3,950**	**1,720**	**525**	**1,340**
July 31, 2007	880	650	230	185	350
Alberta					
December 31, 2006	5,930	5,175	755	600	3,325
March 31, 2007	**3,930**	**3,500**	**430**	**430**	**1,900**
July 31, 2007	820	750	70	180	550
British Columbia					
December 31, 2006	20	20	…	22	27
March 31, 2007	**3**	**3**	**…**	**15**	**16**
July 31, 2007	1	1	…	2	0
Western Canada					
December 31, 2006	16,470	13,370	3,100	1,907	6,477
March 31, 2007	**11,028**	**8,878**	**2,150**	**1,190**	**3,756**
July 31, 2007	1,911	1,611	300	422	1,070

Table 3 – continued

Farm stocks of grain for the 2006/2007 crop year

	Dry peas	Flaxseed	Canola	Corn for grain	Soybeans
	thousands of metric tonnes				
Canada					
December 31, 2006	1,366	715	5,919	6,237	1,554
March 31, 2007	**750**	**550**	**3,833**	**3,874**	**1,016**
July 31, 2007	120	200	679	1,850	275
Maritimes					
December 31, 2006	…	…	…	10	4
March 31, 2007	**…**	**…**	**…**	**4**	**1**
July 31, 2007	…	…	…	0	0
Quebec					
December 31, 2006	…	…	5	2,200	295
March 31, 2007	**…**	**…**	**1**	**1,350**	**200**
July 31, 2007	…	…	0	600	70
Ontario					
December 31, 2006	…	…	4	3,700	1,075
March 31, 2007	**…**	**…**	**2**	**2,250**	**700**
July 31, 2007	…	…	0	1,050	170
Eastern Canada					
December 31, 2006	…	…	9	5,910	1,374
March 31, 2007	**…**	**…**	**3**	**3,604**	**901**
July 31, 2007	…	…	0	1,650	240
Manitoba					
December 31, 2006	60	160	1,200	325	180
March 31, 2007	**40**	**115**	**850**	**270**	**115**
July 31, 2007	10	35	100	200	35
Saskatchewan					
December 31, 2006	1,035	500	2,525	…	…
March 31, 2007	**520**	**390**	**1,625**	**…**	**…**
July 31, 2007	80	130	325	…	…
Alberta					
December 31, 2006	270	55	2,175	2	…
March 31, 2007	**190**	**45**	**1,350**	**0**	**…**
July 31, 2007	30	35	250	0	…
British Columbia					
December 31, 2006	1	…	10	…	…
March 31, 2007	**0**	**…**	**5**	**…**	**…**
July 31, 2007	0	…	4	…	…
Western Canada					
December 31, 2006	1,366	715	5,910	327	180
March 31, 2007	**750**	**550**	**3,830**	**270**	**115**
July 31, 2007	120	200	679	200	35

Concepts and definitions

Definitions of the crop categories referenced in Report No. 3, Field Crop Reporting Series are listed below.

Stocks on farms: farm held stocks of grains include marketable grain and special crops, reserves for on farm feed, seed use and dockage.

Commercial stocks: stocks of grain held at facilities such as elevators, terminals, mills, etc. Commercial stocks exclude dockage.

Dockage: dockage is material that must be removed from grain in order that the commodity can be assigned the highest grade for which it qualifies.

Major grains: wheat, oats, barley, rye, flaxseed, canola, corn for grain and soybeans.

Coarse grains: oats, barley, rye, corn for grain and mixed grains.

Oilseeds: canola, flaxseed and soybeans.

Major special crops: dry peas, lentils, mustard seed, sunflower seed, Canary seed and chick peas.

Methodology and data quality

Survey frame and sample selection

The target populations for the March 31 farm stock estimates include all farms in Canada enumerated in the Census of Agriculture except those on Indian reserves and farms from the Northwest Territories, Yukon and Atlantic region. Institutional farms are also excluded from the target population.

Every five years, the Census of Agriculture collects information on agricultural operations across Canada, including institutional farms, community pastures, Indian reserves, etc. The Census of Agriculture provides a list of farms and their crop areas from which a probability sample for the March 31 farm stock estimates is selected.

Probability surveys can use two types of sampling frames, list and area. In the March 31 Farm Stocks Survey, only the list frame is used in sample selection. This list frame is stratified into homogenous groups on the basis of Census characteristics (such as farm size and crop area) and sub-provincial geographic boundaries. A sample of approximately 16, 000 farms is drawn from the list frame for the March 31 Farm Stocks Survey.

Data collection

Data collection for the March 31 Farm Stocks Survey was carried out from March 20 to March 31, 2008.

Data collection for field crop surveys is undertaken using the “Computer assisted telephone interview” (CATI) system.

Edit and imputation

With the introduction of the CATI system, it is now possible to implement edit procedures at the time of the interview. Computer programmed edit checks in the CATI system inform interviewers during the interview of possible data errors, which can then be corrected immediately by the interviewer and respondent. CATI significantly reduces the need for subsequent telephone follow-up, thereby reducing respondent burden and survey processing time.

Response rate

Usually by the end of the collection period, 85% of the questionnaires have been fully completed. The refusal rate to the survey is approximately 8% to 9%. The remainder of the sample unaccounted for, can be explained by non-contact. Initial sample weights are adjusted (a process called raising factor adjustment) in cases of total and partial non-response; no imputation is performed for missing values.

Sampling and non-sampling errors

The statistics contained in this publication are based on a random sample of agricultural operations and, as such, are subject to sampling and non-sampling errors. The overall quality of the estimates depends on the combined effect of these two types of errors.

Sampling errors arise because estimates are derived from sample data and not the entire population. These errors depend on factors such as sample size, sampling design and the method of estimation. An important feature of probability sampling is that sampling errors can be measured from the sample itself.

Non-sampling errors are errors which are not related to sampling and may occur throughout the survey operation for many reasons. For example, non-response is an important source of non-sampling error. Coverage, differences in

the interpretation of questions, incorrect information from respondents, mistakes in recording, coding and processing of data are other examples of non-sampling errors.

Estimation

The survey data collected are weighted in order to produce unbiased level indicators which are representative of the population. These level indicators then undergo a validation process, based on subject matter analysis and consultation with provincial statisticians, before a final estimate is published.

Estimates of farm stocks of grains are obtained by a survey of farm operations but a major tool used in the verification of these estimates is the farm supply-disposition (or supply-demand) balance sheet. This table reflects activity **on farms only** before grain enters the commercial system. The total supply and the disposition must be equal.

The supply is composed of opening farm stocks and production. The disposition is comprised of deliveries, seed use, closing farm stocks and feed, waste and dockage. The production and farm stock data are estimated from large surveys of Canadian farmers. Seed use data are based on average seeding rates.

A major portion of the deliveries are licensed grain deliveries obtained from the Canadian Grain Commission (CGC). Statistics Canada (STC) adjusts these deliveries during the estimation process to account for CGC quality problems and data lags. The adjustments are calculated mainly from commercial supply-demand tables using data available in the CGC publication Grain Statistics Weekly. However, the deliveries published in the STC farm supply-disposition tables reflect the CGC published data plus STC estimates for unlicensed deliveries to both domestic and export markets and to condominium storage.

The feed, waste and dockage (fwd) component is a residual in the balance sheet. Indicators such as the number of grain consuming animal units, harvest conditions affecting grain quality, established ratios of dockage to delivered grain and grain inspections are used to ensure data accuracy. An unusual estimate in this component may indicate a problem with another data series such as deliveries or may show a change in feeding patterns. Farm stocks are estimated from survey indicators in conjunction with the other components of the balance sheet. Therefore, any apparent fwd anomalies are unlikely to reflect problems with the level of the farm stocks.

National supply and disposition tables provide further information to aid in estimating farm stocks. More detailed information on supply and disposition tables may be obtained in the October issue of Statistics Canada catalogue 22-007-X, Cereals and Oilseeds Review.

Revisions

Stocks data are subject to revision for two years after first being published. Any revisions are published in the July 31 stocks report, which is released in September.

The following table 1 contains some statistics which indicate the magnitude and direction of past revisions to the March farm stocks data. The magnitude is measured by the average percent change between the preliminary and final estimates. The direction of revisions is indicated by counting the number of years that the preliminary estimate is above or below the final revised estimate.

The data indicate, for example, that the preliminary estimates of wheat farm stocks are revised by a magnitude of, on average, 1.3% and usually in a upward direction.

Text table 1
Magnitude and direction of past revisions to March 31 farm stocks estimates, Canada, 1997 to 2007

	Average change	Number of years preliminary farms stocks data are revised:	
		Upwards	Downwards
	percent	number	
Wheat	1.3	9	1
Oats	2.7	6	1
Barley	0.8	4	3
Flaxseed	2.7	5	1
Canola	1.8	8	0
Corn for grain	0.5	1	1
Soybeans	4.1	7	2

Data quality

The March 31 farm stocks estimates are based on level indicators obtained from a probability survey of farming operations. The potential error introduced by sampling can be estimated from the sample itself by using a statistical measure called the coefficient of variation (c.v.). Over repeated surveys, 95 times out of 100, the relative difference between a sample estimate and what should have been obtained from an enumeration of all farming operations would be less than twice the coefficient of variation. This range of values is referred to as the confidence interval. While published estimates may not exactly equal the level indicators (due to the validation and consultation process), these estimates usually remain within the confidence interval of the survey level indicators. For the March 31 Farm Stocks Survey, c.v.'s at the Canada level range from 3% to 10% for the major crops.

Data confidentiality

Data confidentiality is ensured under the Statistics Act, which prohibits the divulging of individual or aggregated data where individuals or businesses might be identified.