



Field Crop Reporting Series





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Statistics Canada Agriculture Division

Field Crop Reporting Series

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

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Table of contents

Highlights	6
Title	
Analysis section	7
Stocks of Canadian grain at December 31, 2007	7
Concepts and definitions	9
Tables	
Table 1 Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and	
2007/2008	
Table 2 Table 2 Farm stocks of grain for the 2007/2008 crop year, Canada and provinces	
Table 3 Table 3 Farm stocks of grain for the 2006/2007 crop year, Canada and provinces	18
Methodology and data quality	
Survey frame and sample selection	
Data collection	
Edit and imputation	
Response rate	
Sampling and non-sampling errors	
Estimation	21
Revisions	
Text table 1 Magnitude and direction of past revisions to December 31 farm stocks estimate	
Canada, 1996 to 2006	
Data quality	
Data confidentiality	22

Highlights

Stocks of Canadian grain at December 31, 2007

Stocks of grains and oilseeds in the Prairie provinces were down as of December 31, 2007, compared with the same date in 2006, but in Ontario and Quebec, stocks of corn for grain hit a record high.

Analysis section

Stocks of Canadian grain at December 31, 2007

Stocks of grains and oilseeds in the Prairie provinces were down as of December 31, 2007, compared with the same date in 2006, but in Eastern Canada, stocks of corn for grain hit a record high.

Results from the December 31 survey of Canadian grain farmers and commercial grain holders show that on the Prairies, stock estimates for all major grains and oilseeds were down, except for oats. The largest declines occurred in wheat, canola and flaxseed.

In the East, farm stocks of corn for grain in Ontario and Quebec easily passed the previous records, the result of a record corn harvest in 2007.

The previous record was set in Ontario in 2006 and in Quebec in 2005. Soybean stocks fell to below the five-year average.

Wheat stocks tumble

Total stocks of wheat, which include on-farm and commercial stocks, were estimated at 15.1 million tonnes, a decrease of 29.8% or 6.4 million tonnes from December 2006. The decline was mainly the result of a 20.6% drop in wheat production in 2007.

Total inventories of wheat excluding durum tumbled 29.8% from December 2006 to 12.3 million tonnes. The five-year average is 15.1 million tonnes. The decline in commercial stocks was not as large as they fell 14.4% to 3.1 million tonnes.

Farmers reported decreases of on-farm stocks in all three Prairie provinces. The largest decline was reported in Saskatchewan, where stocks were estimated at 3.4 million tonnes, down by 2.6 million tonnes. The five-year average is 4.9 million tonnes.

In addition, total stocks of durum wheat fell 29.5% to 2.9 million tonnes, well below the five-year average of 4.6 million tonnes. Despite the increase in durum production in 2007, the lower stock number in December was due to much lower carry-in stocks at the beginning of the 2007-2008 crop year. Commercial stocks of durum were more buoyant; they slipped only 5.4% to 920,000 tonnes.

Durum producers in Saskatchewan and Alberta reported they held much less durum on their farms this year. In Saskatchewan, where the majority of Canadian durum wheat is grown, stocks fell 34.0% to 1.6 million tonnes. Alberta farmers reported a 47.0% decrease to 400,000 tonnes.

General decline in feed grain stocks

Total stocks of barley as of December 31, 2007, declined a slight 4.9% to 7.1 million tonnes, a level well below the five-year average of 8.0 million tonnes. On the other hand, commercial stock levels were up 50.4% to 768,100 tonnes.

On-farm stocks in all three Prairie provinces fell, with declines ranging from 3.8% in Alberta to 14.8% in Saskatchewan. Estimates in each province were below the five-year average.

Total stocks of field peas dropped 6.5% to 1.5 million tonnes, an estimate below the five-year average of 1.6 million tonnes. Commercial stocks rose 195,000 tonnes to 270,000 tonnes.

On-farm stocks of field peas declined in all three Prairie provinces to levels below the corresponding five-year average.

Total stocks of oats rose 14.0% to an estimated 2.7 million tonnes, well above the five-year average of 2.3 million tonnes. This increase mirrors a 21.9% gain in oat production in 2007. Commercial stocks were also strong, rising 9.4% to 255,000 tonnes.

Prairie on-farm stocks rose 17.8% to 2.2 million tonnes, just short of the record of 2.5 million tonnes set in 1999. Stock levels fell a slight 6.6% in Alberta to 560,000 tonnes, while levels rose in Saskatchewan and reached record territory in Manitoba.

Slight dip in canola stocks

Total stocks of canola were 6.5 million tonnes as of December 31, 2007, off 9.3% from December 2006, but still well above the five-year average of 5.4 million tonnes. Canola production in 2007 dropped by 2.8% compared to 2006; in part explaining the decrease.

Declines were reported for on-farm stocks in all three Prairie provinces. The largest decline was reported in Manitoba, where they fell 27.0% to 875,000 tonnes. Levels in Saskatchewan and Alberta were down, but remained above the five-year average.

Prairie on-farm stocks of canola were off 15.2% to 5.0 million tonnes. The five-year average is 4.5 million tonnes.

Commercial stocks rebounded from 2006, rising 18.8% to 1.5 million tonnes.

Flaxseed stocks well below five-year average

Total stocks of flaxseed fell 44.7% to 482,000 tonnes, well below the five-year average of 550,000 tonnes, the result of a 35.9% decrease in production in 2007.

Declines in provincial on-farm stocks as well as stocks in commercial operations were reported.

In Saskatchewan, where most Canadian flaxseed is grown, on-farm stocks fell by 45.0% to 275,000 tonnes.

Ontario and Quebec: Corn stocks hit a record high, while soybeans fell

Stocks of corn for grain were a record, the result of record production in Ontario and Quebec in 2007. Total stocks rose 14.8% to 9.6 million tonnes, easily passing the record of 8.5 million tonnes set in 2005.

On-farm stocks of corn for grain set records in both Ontario and Quebec. Ontario stocks were up 13.6% to 4.2 million tonnes, while in Quebec, stocks surged 42.0% to 3.1 million tonnes.

Total stocks of soybeans fell, the result of a drop in 2007 production. Total soybean stocks amounted to 1.7 million tonnes, down 34.9% or 928,000 tonnes.

On-farm stocks were lower in both Quebec and Ontario, falling to well below the five-year average. Commercial stocks fell 26.6% to 810,000 tonnes, well below the five-year average of 859,000 tonnes.

Concepts and definitions

Definitions of the crop categories referenced in Report No. 1, 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.

Oilseeds: canola, flaxseed and soybeans.

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

Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and 2007/2008

		Crop years	
	2005/2006	2006/2007	2007/2008
•	'00'	00 metric tonnes	
All wheat			
December 31			
Stocks on farms	19,039	16,962	11,116
Commercial stocks ¹	4,755	4,611	4,031
Total stocks	23,794	21,573	15,147
March 31			
Stocks on farms	13,871	11,263	
Commercial stocks ¹	4,722	4,714	
Total stocks	18,593	15,977	
July 31			
Stocks on farms	4,265	1,979	
Commercial stocks ¹	5,433	4,824	
Total stocks	9,698	6,803	
Wheat (excluding durum)			
December 31			
Stocks on farms	13,891	13,862	9,166
Commercial stocks ¹	3,510	3,639	3,112
Total stocks	17,401	17,501	12,278
March 31			
Stocks on farms	9,871	9,113	
Commercial stocks ¹	3,515	3,689	
Total stocks	13,386	12,802	
July 31			
Stocks on farms	2,625	1,679	
Commercial stocks ¹	3,799	3,892	
Total stocks	6,424	5,571	
Durum wheat			
December 31			
	£ 140	2 100	1.050
Stocks on farms	5,148	3,100	1,950
Commercial stocks ¹	1,245	972	920
Total stocks	6,393	4,072	2,870
March 31			
Stocks on farms	4,000	2,150	
Commercial stocks ¹	1,207	1,025	
Total stocks	5,207	3,175	
July 31			
Stocks on farms	1,640	300	
Commercial stocks ¹	1,633	933	
Total stocks	3,273	1,233	

^{1.} Includes condominium stocks as of December 2005

Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and 2007/2008 (continued)

		Crop years	
	2005/2006	2006/2007	2007/2008
	'00'	0 metric tonnes	
Oats			
December 31			
Stocks on farms	2,443	2,139	2,449
Commercial stocks ¹	235	233	255
Total stocks	2,678	2,372	2,703
March 31			
Stocks on farms	1,604	1,317	
Commercial stocks ¹	234	231	
Total stocks	1,838	1,548	
July 31			
Stocks on farms	735	467	
Commercial stocks ¹	137	89	
Total stocks	872	556	
Barley			
December 31			
Stocks on farms	8,875	6,962	6,337
Commercial stocks ¹			
	549	511	768
Total stocks	9,424	7,473	7,105
March 31	5.110	4.0.54	
Stocks on farms	6,118	4,061	
Commercial stocks ¹	352	511	
Total stocks	6,470	4,572	••
July 31			
Stocks on farms	3,027	1,200	
Commercial stocks ¹	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	
Commercial stocks		••	
Total stocks		••	
July 31			
Stocks on farms	170	105	
Commercial stocks			
Total stocks			

^{1.} Includes condominium stocks as of December 2005

Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and 2007/2008 (continued)

		Crop years	
	2005/2006	2006/2007	2007/2008
	'000	O metric tonnes	
Flaxseed			
December 31			
Stocks on farms	630	715	355
Commercial stocks ¹	91	155	127
Total stocks	721	870	482
March 31			
Stocks on farms	530	550	
Commercial stocks ¹	96	186	
Total stocks	626	736	
July 31			
Stocks on farms	250	200	
Commercial stocks ¹	86	173	
Total stocks	336	373	
Canola			
December 31			
Stocks on farms	6,558	5,919	5,020
Commercial stocks ¹	926	1,247	1,482
Total stocks	7,484	7,166	6,502
March 31			
Stocks on farms	4,105	3,833	
Commercial stocks ¹	1,031	922	
Total stocks	5,136	4,755	
July 31			
Stocks on farms	1,113	679	
Commercial stocks ¹	894	1,141	
Total stocks	2,007	1,820	
Corn for grain			
December 31			
Stocks on farms	6,555	6,237	7,725
Commercial stocks	1,908	2,128	1,874
Total stocks	8,463	8,365	9,599
March 31			
Stocks on farms	4,470	3,874	
Commercial stocks	1,304	1,577	
Total stocks	5,774	5,451	
August 31			
Stocks on farms	1,580	850	
Commercial stocks	421	493	
Total stocks	2,001	1,343	••

Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and 2007/2008 (continued)

		Crop years	
	2005/2006	2006/2007	2007/2008
	00'	0 metric tonnes	
Soybeans			
December 31			
Stocks on farms	1,378	1,554	919
Commercial stocks	915	1,103	810
Total stocks	2,293	2,657	1,729
March 31	2,223	2,007	1,727
Stocks on farms	1,021	1,016	
Commercial stocks	650	870	••
Total stocks	1,671	1,886	••
August 31	1,071	1,000	••
Stocks on farms	200	130	
Commercial stocks	295	340	
Total stocks	495	470	
Total Stocks	493	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	
Commercial stocks	340	260	
Total stocks	1,540	1,010	
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			2.00
Stocks on farms	710	465	
Commercial stocks	45	36	•• ••
Total stocks	755	501	
July 31	, , ,		
Stocks on farms	445	115	
Commercial stocks	30	24	
Total stocks	475	139	

Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and 2007/2008 (continued)

	2005/2006	2006/2007	2007/2008
	'000'	0 metric tonnes	
Mustard seed			
December 31			
Stocks on farms	253	190	67
Commercial stocks	43	29	40
Total stocks	296	219	107
March 31	270	21)	107
Stocks on farms	202	130	
Commercial stocks	46	42	••
Total stocks	248	172	••
July 31	240	172	••
Stocks on farms	150	55	
Commercial stocks	40	36	••
Total stocks	190	91	
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	
Commercial stocks	7	6	
Total stocks	57	81	
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	512		1,1
Stocks on farms	239	164	
Commercial stocks	26	34	••
Total stocks	265	198	
July 31	203	170	
Stocks on farms	170	95	
Commercial stocks	20	26	••
Total stocks	190	121	

Table 1 Stocks of Canadian grain for the crop years 2005/2006, 2006/2007 and 2007/2008 (concluded)

	Crop years			
	2005/2006	2006/2007	2007/2008	
	000'	0 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		
Commercial stocks	10	14		
Total stocks	50	69		
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, Canada and provinces

9		Wheat	Durum		
Provinces and regions	All wheat (excl. durum)	wheat	Oats	Barley
-		'000 i	metric tonnes		
Canada December 31, 2007	11,116	9,166	1,950	2,449	6,337
March 31, 2008		9,100	1,930	2,449	0,337
July 31, 2008					
Maritimes					
December 31, 2007	21	21	•••	19	82
March 31, 2008					
July 31, 2008					
Quebec					
December 31, 2007	95	95	•••	140	175
March 31, 2008			•••		
July 31, 2008		••	•••		••
Ontario	275	27.5		40	1.40
December 31, 2007	275	275	•••	40	140
March 31, 2008 July 31, 2008	••	••	•••	••	••
•			•••	••	••
Eastern Canada	391	391		199	207
December 31, 2007 March 31, 2008			•••		397
July 31, 2008					
Manitoba					
December 31, 2007	1,550	1,550	•••	560	740
March 31, 2008					••
July 31, 2008			•••		••
Saskatchewan					
December 31, 2007	4,900	3,350	1,550	1,100	2,000
March 31, 2008					
July 31, 2008					
Alberta	4.250	2.050	400	# <0	2 200
December 31, 2007	4,250	3,850	400	560	3,200
March 31, 2008 July 31, 2008	••		••		
•	••	••		••	••
British Columbia December 31, 2007	25	25	•••	30	0
March 31, 2008			•••		
July 31, 2008			•••		
Western Canada					
December 31, 2007	10,725	8,775	1,950	2,250	5,940
March 31, 2008					
July 31, 2008				••	

Table 2 Farm stocks of grain for the 2007/2008 crop year, Canada and provinces (concluded)

Provinces and regions	Dry peas	Flaxseed	Canola	Corn for grain	Soybeans
	'000 metric tonnes				
Canada			~ ~ ~ ~		0.1.0
December 31, 2007	1,190	355	5,020	7,725	919
March 31, 2008			••		
July 31, 2008		••	••	••	
Maritimes					
December 31, 2007	•••	•••		23	4
March 31, 2008	•••		•••		
July 31, 2008	•••	•••	•••		••
Quebec					
December 31, 2007	•••	•••	5	3,125	140
March 31, 2008					
July 31, 2008	•••	•••			
Ontario					
December 31, 2007	•••		8	4,200	675
March 31, 2008				••	
July 31, 2008	•••				
Eastern Canada					
December 31, 2007			13	7,348	819
March 31, 2008				,,510	
July 31, 2008		•••			
Manitoba					
December 31, 2007	30	60	875	360	100
March 31, 2008					
July 31, 2008					
•		••	••	••	
Saskatchewan	0.50	27.5	2 27 5		
December 31, 2007	950	275	2,275	•••	
March 31, 2008 July 31, 2008		••		•••	•••
•	••	••	••	•••	•••
Alberta					
December 31, 2007	210	20	1,850	17	
March 31, 2008					•••
July 31, 2008	••	••	••	••	
British Columbia					
December 31, 2007	•••		7		
March 31, 2008					
July 31, 2008	•••	•••	••	•••	
Western Canada					
December 31, 2007	1,190	355	5,007	377	100
March 31, 2008	•••				
July 31, 2008					

Table 3 Farm stocks of grain for the 2006/2007 crop year, Canada and provinces

Provinces and regions	All wheat	Wheat (excl. durum)	Durum wheat	Oats	Barley
			netric 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 Farm stocks of grain for the 2006/2007 crop year, Canada and provinces (concluded)

Provinces and regions	Dry peas	Flaxseed	Canola	Corn for grain	Soybeans
		'000 r	netric 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
•	•••	•••	O	1,050	170
Eastern Canada			•	5 010	1.07.4
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	1 0	•••	5	•••	•••
July 31, 2007	0	•••	4	•••	
•	V	•••		•••	•••
Western Canada	1 266	715	5.010	227	100
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

Methodology and data quality

Survey frame and sample selection

The target population for the December 31 farm stock estimates includes 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 December 31 farm stock estimates is selected.

Probability surveys can use two types of sampling frames, list and area. In the December 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 11,800 farms is drawn from the list frame for the December 31 Farm Stocks Survey.

Data collection

Data collection for the December 31 Farm Stocks Survey was carried out from January 2 to January 9, 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, 80% of the questionnaires have been fully completed. The refusal rate to the survey is approximately 5%. 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 22-007XIB, 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 contains some statistics which indicate the magnitude and direction of past revisions to the December 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, 2.5% and usually in a downwards direction.

Text table 1 Magnitude and direction of past revisions to December 31 farm stocks estimates, Canada, 1996 to 2006

Crop	Numbe	Number of years preliminary farms stocks data are revised:	
	Average change in %	Upwards	Downwards
Wheat	2.5	3	8
Oats	3.3	3	6
Barley	2.5	2	8
Flaxseed	3.0	2	5
Canola	2.3	6	4
Corn for grain	1.3	6	3
Soybeans	0.5	4	4

Data quality

The December 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 do remain within the confidence interval of the survey level indicators. For the December 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.