

# Canada Western Red Winter (CWRW) Select – What's it about?

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## INTRODUCTION

The objective of the CWB's market development work on CWRW is to improve the acceptance of CWRW in domestic and export markets and improve returns for farmers. As part of that effort, the CWRW Select Market Development Contract Program (MDCP) is intended to generate commercial quantities of CWRW varieties with superior milling and baking qualities for market testing purposes.

The following information provides current trends in production of CWRW wheat across the prairie provinces and reviews ongoing market development efforts for the CWRW Select contract program.

## ACREAGE AND VARIETY SURVEY OF CWRW WHEAT IN WESTERN CANADA

Adoption of CWRW wheat varieties across the prairies has been driven by the improvements in adaptability of the various varieties for better disease resistance and good winter hardiness (Table 1). CWB variety survey for CWRW indicates:

### Manitoba

- With the introduction of newer varieties there has been a decline in acreage of CDC Kestrel since the first survey in 1998.
- Varieties such as CDC Clair and CDC Harrier increased in acreage for a couple of years, before beginning to decline in 2000 and 2001 respectively.
- CDC Falcon has rapidly increased in acreage since its introduction and currently dominates the provincial acreage at close to 65 per cent.

### Saskatchewan

- CDC Clair has dominated provincial acreage at over 55 per cent for the last four years, but has been declining since 2001.
- CDC Harrier and CDC Kestrel are also declining in acreage.
- CDC Falcon has been increasing in acreage since 2001, while CDC Osprey and CDC Raptor have been increasing since 2002. It is expected these varieties will continue to take over acreage from older varieties.

### Alberta

- CDC Clair has been declining in acreage since 2001. CDC Kestrel has been in similar decline, although it is showing an increase for 2003.
- AC Readymade has dropped from 2001, but has been steady at 11 per cent for the last two years, while AC Tempest has dropped significantly from 2001.
- CDC Osprey and AC Bellatrix have shown a marked increase in acreage for 2001 and 2002, while CDC Falcon has shown a slight increase during this period.

The development of agronomically suited varieties and adoption of direct seeding practices has led to increased expansion of winter wheat acres, especially into the eastern Prairie provinces of Manitoba and Saskatchewan (Figure 1.). However, these varieties showing improved disease resistance and adaptability for production under Eastern Prairie conditions do not meet customer quality requirements for milling and baking.

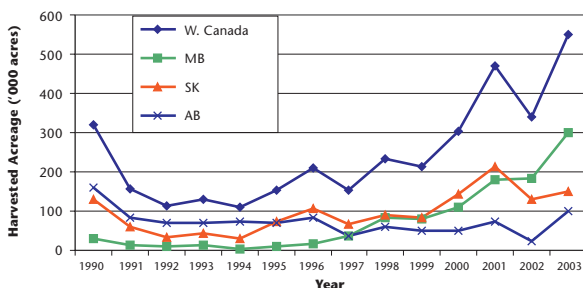


Figure 1. Harvested Acreage of CWRW in western Canada (1990-2003)

Source: Statistic Canada, Field Crop Reporting series

TABLE 1. Percentage of CWRW area by variety across Prairie provinces.

Variety	Alberta					
	1998	1999	2000	2001	2002	2003
CDC Falcon	(n/a)	(n/a)	0	0	4.3	6.3
CDC Clair	12.5	22.9	45.6	46.3	31.9	23.7
CDC Osprey	1.3	5.7	11.1	6.3	19.1	25.2
CDC Harrier	(n/a)	(n/a)	0.0	0.0	0.0	0.0
CDC Kestrel	33.7	49.7	18.9	4.0	5.8	12.2
CDC Raptor	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.5
AC Bellatrix	(n/a)	(n/a)	0.0	1.2	6.9	14.2
AC Readymade	52.0	21.7	24.3	42.1	11.3	11.4
Norstar	(n/a)	(n/a)	(n/a)	(n/a)	0.0	2.9
AC Tempest	(n/a)	(n/a)	(n/a)	(n/a)	20.5	3.7
McClintock	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.0
CDC Buteo	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.0

Variety	Saskatchewan					
	1998	1999	2000	2001	2002	2003
CDC Falcon	(n/a)	(n/a)	0.4	0.0	8.5	9.7
CDC Clair	10.2	34.5	66.3	71.2	67.3	55.4
CDC Osprey	0.0	0.0	0.0	0.0	0.0	9.2
CDC Harrier	(n/a)	(n/a)	1.8	9.6	8.9	5.7
CDC Kestrel	88.6	65.5	31.4	19.2	12.4	8.4
CDC Raptor	(n/a)	(n/a)	(n/a)	(n/a)	0.0	8.8
AC Bellatrix	(n/a)	(n/a)	0.0	0.0	1.7	1.8
AC Readymade	0.7	0.0	0.1	0.0	0.0	0.0
Norstar	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.7
AC Tempest	(n/a)	(n/a)	(n/a)	(n/a)	1.3	0.0
McClintock	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.0
CDC Buteo	(n/a)	(n/a)	(n/a)	(n/a)	0.0	*T

Variety	Manitoba					
	1998	1999	2000	2001	2002	2003
CDC Falcon	(n/a)	(n/a)	0.9	0.0	45.5	64.6
CDC Clair	3.4	35.9	46.1	43.5	25.6	12.1
CDC Osprey	0.7	0.0	0.2	0.0	0.0	0.3
CDC Harrier	(n/a)	(n/a)	8.8	34.7	18.4	14.5
CDC Kestrel	95.9	64.1	43.9	21.8	10.4	2.3
CDC Raptor	(n/a)	(n/a)	(n/a)	(n/a)	0.0	5.6
AC Bellatrix	(n/a)	(n/a)	0.2	0.0	0.0	0.0
AC Readymade	0.0	0.0	0.0	0.0	0.2	0.0
Norstar	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.3
AC Tempest	(n/a)	(n/a)	(n/a)	(n/a)	T	0.0
McClintock	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.5
CDC Buteo	(n/a)	(n/a)	(n/a)	(n/a)	0.0	T

\*Trace

The CWRW Select MDCP segregates varieties better suited to milling and baking, relative to other varieties in the CWRW class (List 1).

When grown in their region of adaptability, the CWRW Select eligible varieties can achieve or exceed the yield potential of non-select quality varieties that currently dominate the class. CDC Buteo and McClintock are two new varieties exhibiting excellent grain quality with good disease resistance, making them adaptable to the Eastern Prairies. CDC Osprey and AC Bellatrix have high yield potential, good quality and winter hardiness, making them suitable for non-rust regions of Western Canada. AC Readymade and AC Tempest lack strong winter hardiness, restricting their adaptability to the milder winter regions of southern Alberta. Variety survey results show an increase in acreage of CWRW Select varieties prairie-wide (Table 2).

Table 2: Percentage of CWRW area by variety in Western Canada

Variety	Prairie Average					
	1998	1999	2000	2001	2002	2003
CDC Falcon	(n/a)	(n/a)	(n/a)	0.0	29.4	32.9
CDC Clair	7.8	32.5	54.6	55.0	38.7	26.6
CDC Osprey	0.5	1.3	1.7	1.0	2.4	10.2
CDC Harrier	(n/a)	(n/a)	4.6	19.0	13.3	7.8
CDC Kestrel	81.6	61.4	35.0	17.8	10.4	6.9
CDC Raptor	(n/a)	(n/a)	(n/a)	(n/a)	0.0	4.8
AC Bellatrix	(n/a)	(n/a)	0.1	0.2	1.4	4.8
AC Readymade	9.8	4.8	3.5	7.0	1.5	3.5
Norstar	(n/a)	(n/a)	(n/a)	(n/a)	0.0	1.2
AC Tempest	(n/a)	(n/a)	(n/a)	0.0	3.0	1.1
McClintock	(n/a)	(n/a)	(n/a)	(n/a)	0.0	0.3
Select Varieties	10.3	6.1	5.3	8.2	8.3	21.1
Non-Select	89.4	93.9	94.2	91.8	91.8	79.0

## LIST 1. CWRW SELECT ELIGIBLE VARIETIES

Varieties eligible under the CWRW Select MDCP include:

Eligible Variety	Distributor
AC Bellatrix	Quality Assured Seeds
AC Readymade	SeCan
AC Tempest	SeCan
CDC Buteo	SeCan
CDC Osprey	Canterra Seeds
McClintock	Canterra Seeds
Norstar	Alberta Stock Seed Distribution Committee

## CWRW SELECT MARKET DEVELOPMENT CONTRACT PROGRAM UPDATE

Participation in CWRW Select MDCP has shown steady growth in the program (Table 3). This increase will allow for expanding market testing and will contain a wider range of the eligible CWRW Select varieties.

TABLE 3. Review of the CWRW Select Market Development Contract Program

	2002-03 Special CWRW	2003-04 CWRW Select	2004-05 CWRW Select
Seeded	2001	2002	2003
Marketing Crop Year	2002-03	2003-04	2004-05
Contract Premium	\$5 per tonne	\$10 per tonne	To be announced
Protein Premiums /1	\$0.50 up to 13.5 per cent	\$0.30 up to 14 per cent	To be announced
Seed Requirements	Pedigreed	Pedigreed, or one generation removed from pedigreed	No specific seed requirement. Farmer must deliver 95 per cent pure to eligible variety.
Number of Participants	10 /2	78 /2	152 /2
Contracted Tonnes	3,700 tonnes	16,000 tonnes /2	40,000 tonnes /3

/1 5 per tonne for every 0.1 per cent increment starting at 11.5 per cent protein.

/2 As of December 3, 2003.

/3 Estimated based on acres signed up to date.

## CWB MARKET DEVELOPMENT TECHNICAL PROJECTS AND MARKET TESTING UPDATE

In 2002, the CWB initiated a Market Development Technical Project at the Canadian International Grains Institute (CIGI) to evaluate the breadmaking quality of CWRW varieties eligible for the CWB's CWRW Select program. Samples of the eligible varieties from the 2001 crop were compared with two varieties of U.S. Hard Red Winter (HRW) wheat, Jagger and Morgan, and one variety of Canada Prairie Spring Red (CPSR) wheat, 5700PR.

In this test AC Bellatrix, AC Readymade and McClintock stood out as the varieties of highest quality. AC Tempest was comparable to Jagger and the higher protein sample of Morgan. CDC Osprey and a lower protein Morgan displayed the poorest performance.

Analytical testing, breadmaking and noodle studies are now being repeated with samples from the 2002-03 crop and include several varieties that are not eligible for the CWRW Select program, as well as a composite of generic CWRW and varieties of U.S. HRW.

Preliminary results indicate the quality of the CWRW Select varieties are as good as or better than the U.S. HRW samples and better than CWRW non-Select varieties. Final results from these studies will be distributed to potential customers.

The analytical, breadmaking and noodle studies will be repeated with samples from the 2003-04 crop and will again contain CWRW Select and non-Select varieties, generic CWRW and U.S. HRW varieties for comparison.

The CWB was able to make good use of CWRW Select produced from the 2002 and 2003 harvest with numerous customer samples and one commercial shipment. The CWB sent 30 samples of between 5 and 10 kg to customers in Canada, Malaysia, Mexico, Singapore, Thailand and Venezuela. The number of sample recipients will increase as the program, and the ability to follow up with commercial shipments, grows.

## SUMMARY

More and more farmers are recognizing the benefits of including winter wheat in their crop rotation plans. Thanks to the efforts of participating farmers and the winter wheat partners, the CWB has been able to make good progress toward the objective of improving the acceptance of CWRW in domestic and export markets and improving returns for winter wheat farmers.

For more information on the CWRW Select MDCP please contact the CWB at 1-800-275-4292 or visit [www.cwb.ca](http://www.cwb.ca)