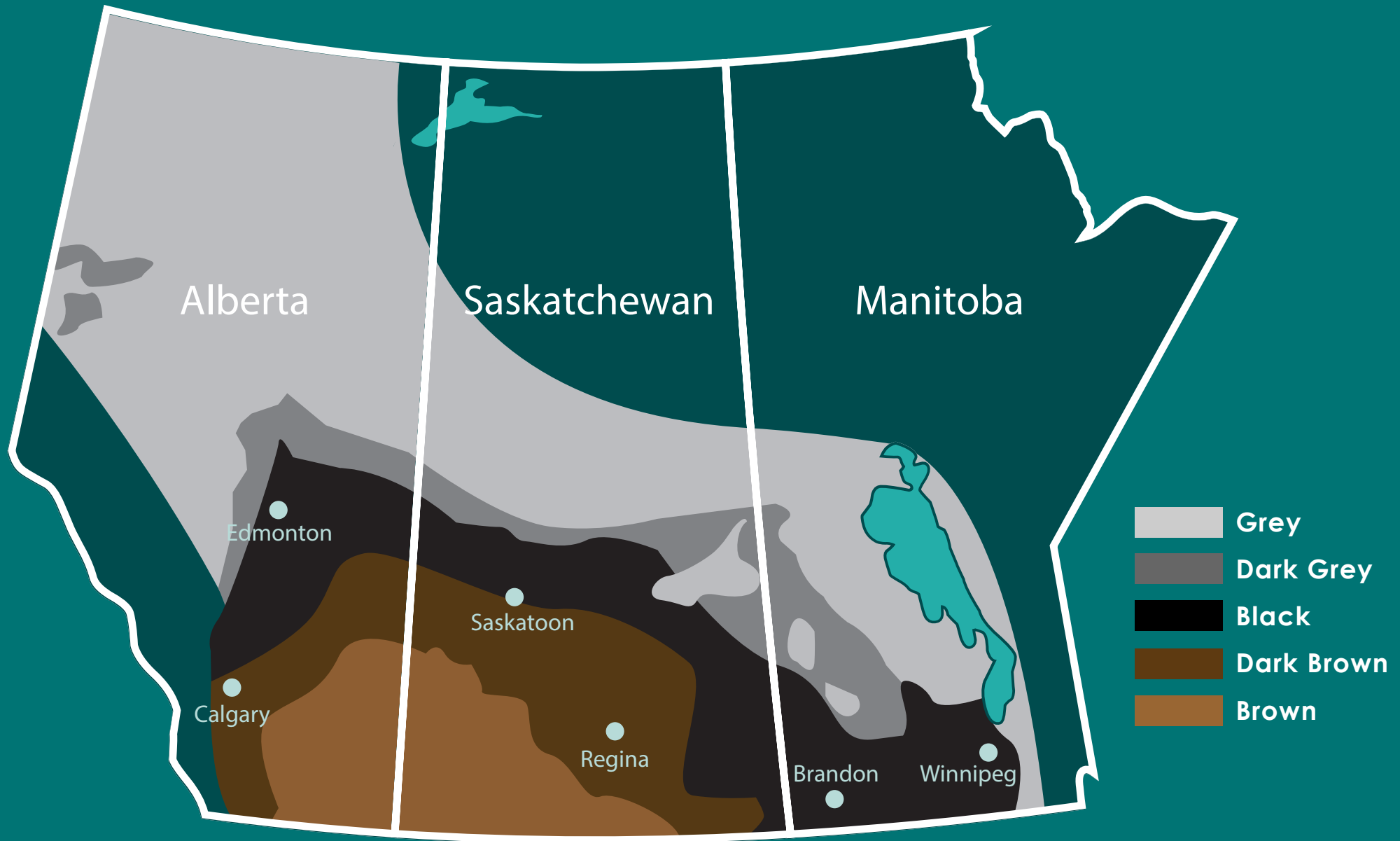


# Winter Wheat Variety Selection Guide




Western Winter Wheat Initiative

# SOIL ZONES IN WESTERN CANADA

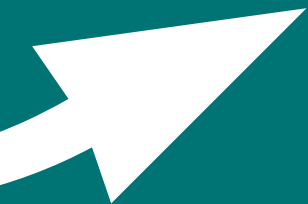


# VARIETY OPTIONS FOR SOIL ZONES

 Western Winter Wheat Initiative <b>Variety</b>	Soil Zone			
	Brown	Dark Brown	Black where Plant Height isn't a major concern	Black/Irrigation where Fusarium or plant height is a concern
<b>Moats</b>	●	●	●	
<b>Radiant</b>	●	●	●	
<b>Buteo</b>	●	●	●	
<b>Emerson</b>			●	●
<b>Gateway</b>				●
<b>Flourish</b>				●

Other varieties to consider (feed/industrial market)  
Pintail, Ptarmigan, Falcon, and Chase.

Elevate and Wildfire are under multiplication.



# Variety Selection

Winter wheat varieties are available with good adaptation to all production areas in Western Canada. When selecting a variety that is best suited for your farming operation, important traits to consider include: winter hardiness, disease resistance, yield potential, market opportunities, and lodging resistance.

## Winter Hardiness

The winter hardiness ratings of most winter wheat varieties registered in Western Canada are good to excellent. Producers who farm in areas of the Prairies outside the Chinook belt should be particularly vigilant in selecting a variety with good winter hardiness. Also, if recommended seeding practices are compromised, such as late seeding or seeding into inadequate stubble, the winter hardiness of a variety can become a critical trait in that crop's success. Properly managed winter wheat on the Canadian Prairies has similar winter survival to winter wheat in Kansas, the largest winter wheat growing state in the United States.

## Disease Resistance

Resistance to diseases common to your area and/or farming practices is another important consideration when deciding on a winter wheat variety. If you are in an area that commonly struggles with rusts, varieties such as Moats and Flourish provide resistance to both stem and leaf rust. If wheat streak mosaic virus is a concern due to past occurrence or tight wheat rotations, Radiant has resistance to the wheat curl mite, the vector of this disease. Producers in areas where Fusarium Head Blight (FHB) is an issue should also be aware that, although winter wheat can avoid this disease in many years, Emerson offers genetic resistance.

## Yield Potential

Yield potential of each variety is influenced by management practices and growing regions of Western Canada. Each of the Prairie Provinces publishes variety guides comparing yields and other traits according to soil climatic zones. These guides are useful resources and should be referred to before purchasing your winter wheat variety. The University of Saskatchewan has also created a variety selection tool based primarily on yield potential. This tool can be accessed at [http://www.usask.ca/agriculture/plantsci/winter\\_cereals/variety-selector/index.php](http://www.usask.ca/agriculture/plantsci/winter_cereals/variety-selector/index.php). Discussions with experienced local winter wheat producers and/or our Western Winter Wheat Initiative agronomists can provide good insight into which varieties may be best suited to your location.

## Lodging Resistance

In high-moisture areas, including irrigation, lodging resistance can be a major issue. Of the four most popular varieties on the Canadian Prairies, CDC Falcon has long been the standard in areas concerned with straw length and lodging. Flourish is a newer variety for areas concerned about lodging and plant height.

## Winter Wheat Varieties for Manitoba

Variety	Traits given as a % of Falcon									
	Overall Yield	Height (Inches)	Protein (%)	Maturity (days)	Winter Survival	Bunt	Stripe Rust	Leaf Rust	Stem Rust	FHB
AAC Elevate	81	2	11.4	M	G	MR	MS	I	MR	I
AAC Gateway	80	1	12.0	M	F	S	MR	I	MR	I
CDC Buteo	79	4	11.3	M	VG	S	S	I	I	MR
CDC Chase	83	7	11.5	M	F	S	MR	R	R	MS
Emerson	82	4	12.2	M	G	S	MR	I	R	R
Flourish	81	2	11.7	E	F	MR	I	I	I	S
McClintock	76	7	11.6	L	F	S	-	MR	R	S
Moats	82	6	11.7	E	G	MS	MR	R	R	S
Canada Western General Purpose										
Accipiter	83	3	11.1	M	G	S	S	MR	R	MS
Broadview	81	2	11.1	E	G	S	S	R	R	S
CDC Falcon	78	0	11.5	E	F	S	S	MR	MR	S
CDC Ptarmigan	81	8	9.8	M	G	S	S	S	S	I
Peregrine	84	10	11.0	M	VG	S	MR	MR	I	I
Sunrise	85	6	10.5	M	G	S	MR	MR	MR	-
Swainson	87	8	10.9	M	F	S	MR	R	R	-

### Legend

VG - Very Good, G - Good, F - Fair, P - Poor

E - Early, M - Mid, L - Late

R - Resistant, MR - Moderately Resistant, I - Intermediate, MS - Moderately Susceptible, S - Susceptible



Western Winter Wheat Initiative

# Winter Wheat Varieties for Saskatchewan

Variety	Overall Yield (% of CDC Buteo)		Winter Survival	Maturity Rating	Protein (%)	Height (cm)	Bunt	Stripe Rust	Leaf Rust	Stem Rust	FHB
	Yield Area 1 & 2	Yield Area 3 & 4									
<b>Canada Western Red Winter</b>											
CDC Buteo	100	100	VG	M	12.3	91	S	S	I	I	MR
CDC Chase	105	110	F	M	+0.3	+3	S	MR	R	R	MS
AAC Elevate	110	104	G	M	0.0	-8	MR	MS	I	MR	I
Emerson	100	-	G	M	+0.4	-5	S	MR	I	R	R
AAC Gateway	97	101	F	M	+0.5	-14	S	MR	I	MR	I
Moats	105	101	G	M	+0.4	+1	MS	MR	R	R	S
CDC Osprey	97	101	VG	M	-0.2	+2	S	S	MS	MS	MS
Radiant	101	101	VG	L	-0.3	-2	S	MS	S	S	S
AAC Wildfire	115	117	VG	VL	0.0	-6	MR	R	I	S	MR
<b>Canada Western General Purpose</b>											
Accipiter	110	106	G	M	-0.9	-7	S	S	I	R	MS
Broadview	96	100	G	E	-0.8	-10	S	S	R	R	S
CDC Falcon	102	98	F	E	-0.8	-16	S	S	MR	MR	S
Peregrine	114	110	VG	M	-1.0	+6	S	MR	MR	I	I
Pintail	105	-	VG	M	-1.7	-3	S	MR	MS	MS	S
CDC Pfarmigan	113	113	G	M	-2.0	+2	S	S	S	S	I
Sunrise	111	119	G	M	-1.2	-2	S	MR	MR	MR	-
Swainson	114	116	F	M	-0.5	+5	S	MR	R	R	-

## Legend

VG - Very Good, G - Good, F - Fair, P - Poor

E - Early, M - Mid, L - Late, VL - Very Late

R - Resistant, MR - Moderately Resistant, I - Intermediate, MS - Moderately Susceptible, S - Susceptible



# Winter Wheat Varieties for Alberta

Traits given as a % of Radiant											
Variety	Overall Yield	Winter Survival	Maturity Rating	Protein (%)	Height (cm)	LDG	Bunt	Stripe Rust	Leaf Rust	Stem Rust	FHB
Canada Western Red Winter											
Radiant	100	VG	L	12.0	90	VG	S	S	S	S	S
CDC Chase	104	F	M	+0.6	94	F	S	MR	R	R	MS
AC Tempest	97-	P	VL	+1.5	91	VG	MS	MR	S	S	I
Emerson	98	G	M	+0.7	86	G	S	MR	I	R	R
Flourish	100	F	E	+0.6	80	VG	MR	I	I	I	S
*AAC Wildfire	115+	VG	VL	+0.3	86	G	MR	R	I	S	MR
*AAC Elevate	105	G	M	+0.3	83	VG	MR	MS	I	MR	I
AAC Gateway	99	F	M	+0.9	77	VG	S	MR	I	MR	I
Moats	105+	G	M	+0.7	91	F	MS	MR	R	R	S
Canada Western General Purpose											
Accipiter	104+	G	M	-0.6	84	VG	S	S	I	R	MS
Broadview	99	G	E	-0.5	81	G	S	S	R	R	S
CDC Falcon	100	F	E	-0.5	75	VG	S	S	MR	MR	S
Pfarmigan	106+	G	M	-1.7	93	F	S	S	S	S	I
Pintail	108+	VG	L	-1.4	88	G	S	MR	MS	MS	S

\*Note: AAC Wildfire and AAC Elevate are in multiplication

## Legend

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Western Winter Wheat Initiative

# Winter Wheat Calendar

	Seeding	Three Leaf		Dormancy			Tillering	Booting	Heading	Ripening		
												
	August	September	October	Nov. Dec. Jan.	February	March	April	May	June	July		
<b>Production Practices</b>	Gather winter wheat production and marketing information											
				Select preceding spring crop and variety								
				Plan spring seeding dates to ensure stubble availability between Aug. 20 and mid-Sept.**			Plant spring crops for optimum stubble availability					
	Spring crop harvest											
				Research winter wheat varieties agronomically suited to your area								
				Ensure the variety meets your marketing objectives								
				Assess establishment				Assess winter survival				
							Prepare seeding equipment					
							Source winter wheat seed					
	Source fertilizer								Source fertilizer			
Nitrogen application (at seeding)*		Nitrogen application (fall broadcast)*						Nitrogen application (spring broadcast)*				
Plant winter wheat Aug. 20 - mid-Sept.												
<b>Disease Management</b>	Treat winter wheat seed								Disease management			
<b>Weed Control</b>	Pre- and post-harvest weed control		Manage winter annual weeds						Weed management			
<b>Stored Grain Management &amp; Marketing</b>	Monitor stored grain											
							Prepare marketing objectives					

\* Select the fertilizer application or combination of applications best suited to your equipment situation and crop conditions.

\*\* Consult local agronomists for recommended seeding dates in your area.

