



# Agronomy Update 2010 Crop Production Week

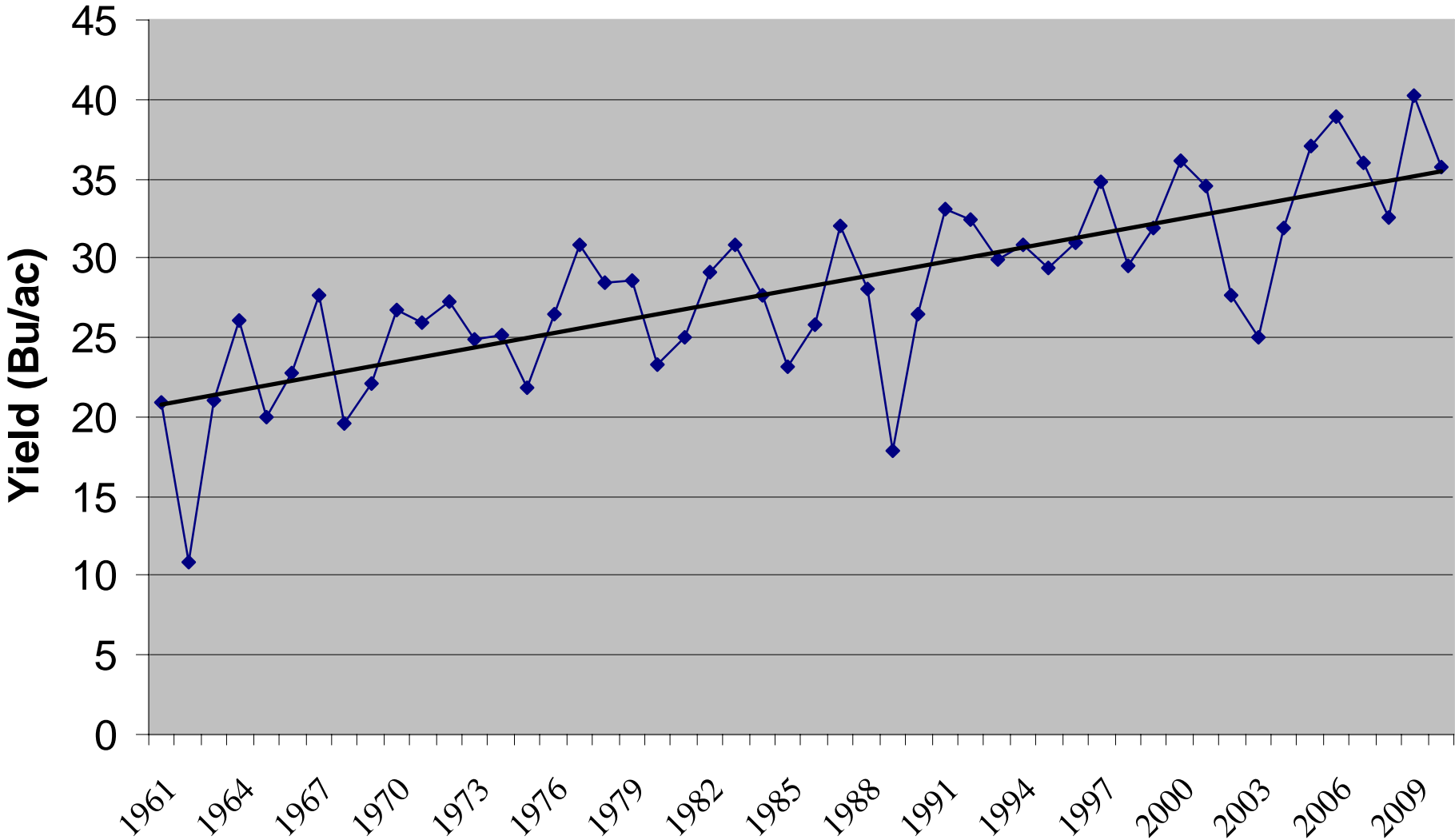
Mike Grenier  
Agronomist  
Marketing Strategy  
January 15<sup>th</sup>, 2010



# Overview

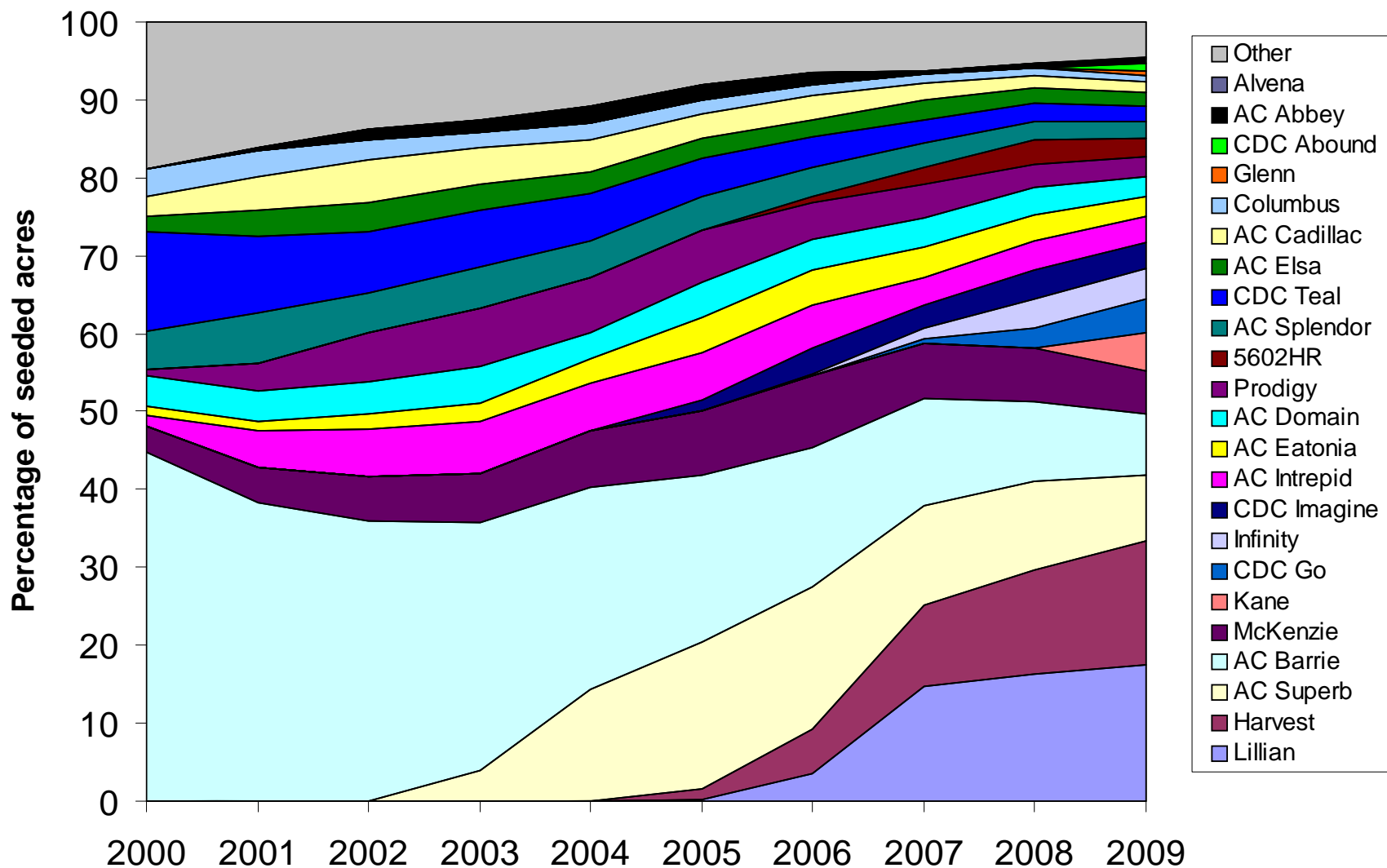
- **Variety Update**
- **Harvest Survey - Crop Quality Review**
  - **Pest forecast**
    - **Wheat Midge**
    - **Grasshoppers**
    - **Ergot**
    - **Fusarium Head Blight**
  - **Protein Levels**

# Western Canada HRS Long Term Yield Trend



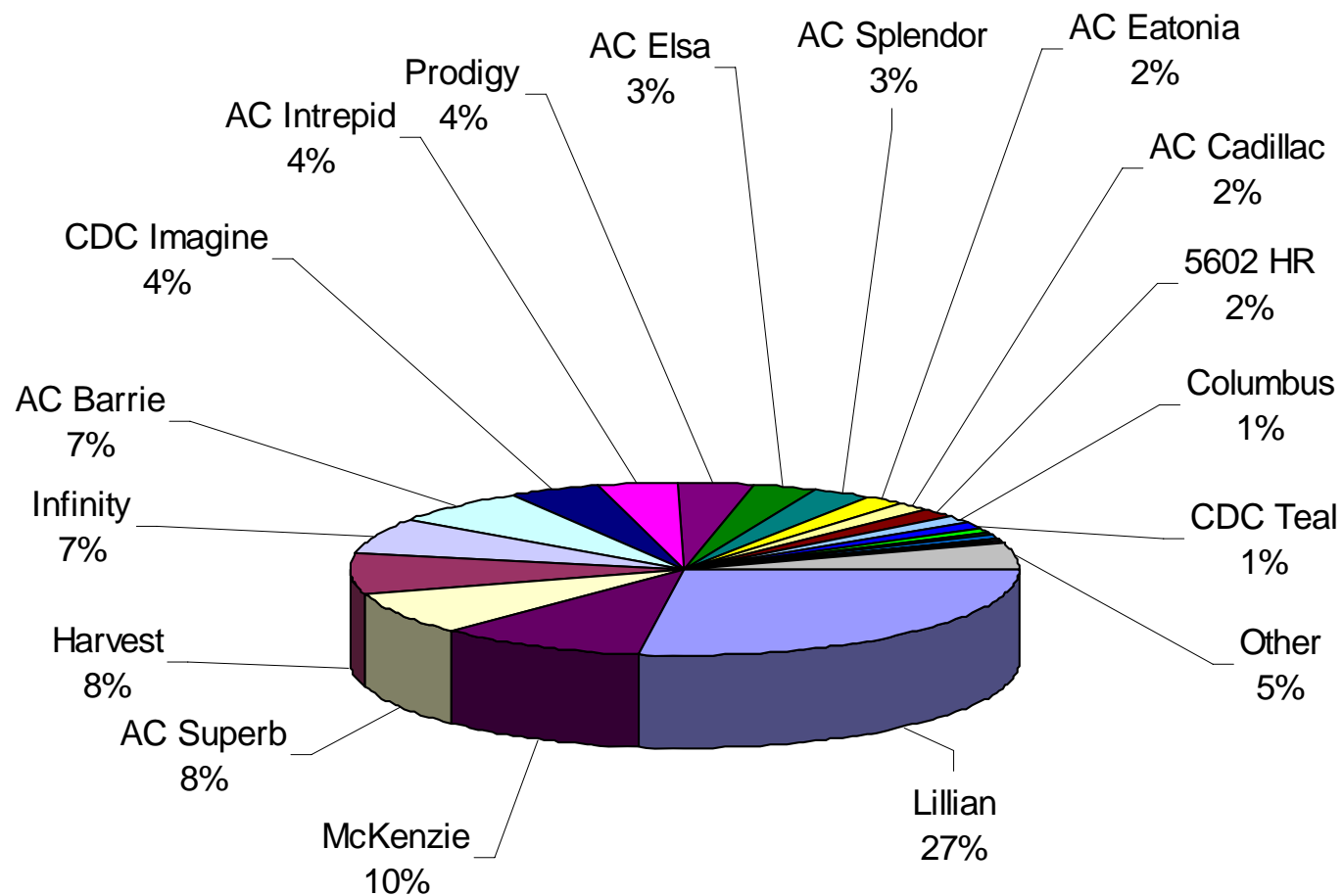
# CWB Variety Survey (2000-2009)

## CWRS - Prairies



# 2009 CWB Variety Survey

## CWRS - Saskatchewan



# New CWRS wheat varieties – since Superb in 2001

(\*Denotes WGRF Supported Varieties)

- **2002 to 06 % 2009 Survey**

5500HR	Trace (T)
CDC Imagine	3.4
*Harvest	15.9
5601HR	0.3
Journey	0.3
Peace	T
*Lovitt	0.1
*CDC Osler	0.4
*CDC Go	4.2
*Lillian	17.5
*Infinity	4.0
*Somerset	0.2
CDC Alsask	0.3
5602HR	2.4
CDC Abound	0.9
*Alvena	0.3
*AC Kane	5.0

- **2007**

\*Goodeve (Midge Resistant)

\*Waskada

\*Unity (Midge Resistant)

\*Fieldstar (Midge Resistant)

- **2008**

5603HR

WR859CL

\*Stettler

- **2009**

Glenn

Carberry

Muchmore

Shaw

CDC 880, 881, & 883

BW878



# CWRS Variety Introductions

## 2010

- Glenn Fair for FHB, very good for leaf rust, late
- Goodeve Midge Tolerant, good for leaf rust, VP for FHB
- Unity Midge Tolerant, VG for leaf rust, poor for FHB
- Waskada Good for FHB, F for rust
- Fieldstar Midge tolerant, Fair for FHB – may be 2011?

## 2011

- 5603HR VG Leaf rust, F for FHB, late
- WR859CL Clearfield, Good for FHB, VG for leaf rust
- Stettler High yield, poor for leaf rust and FHB

## 2012

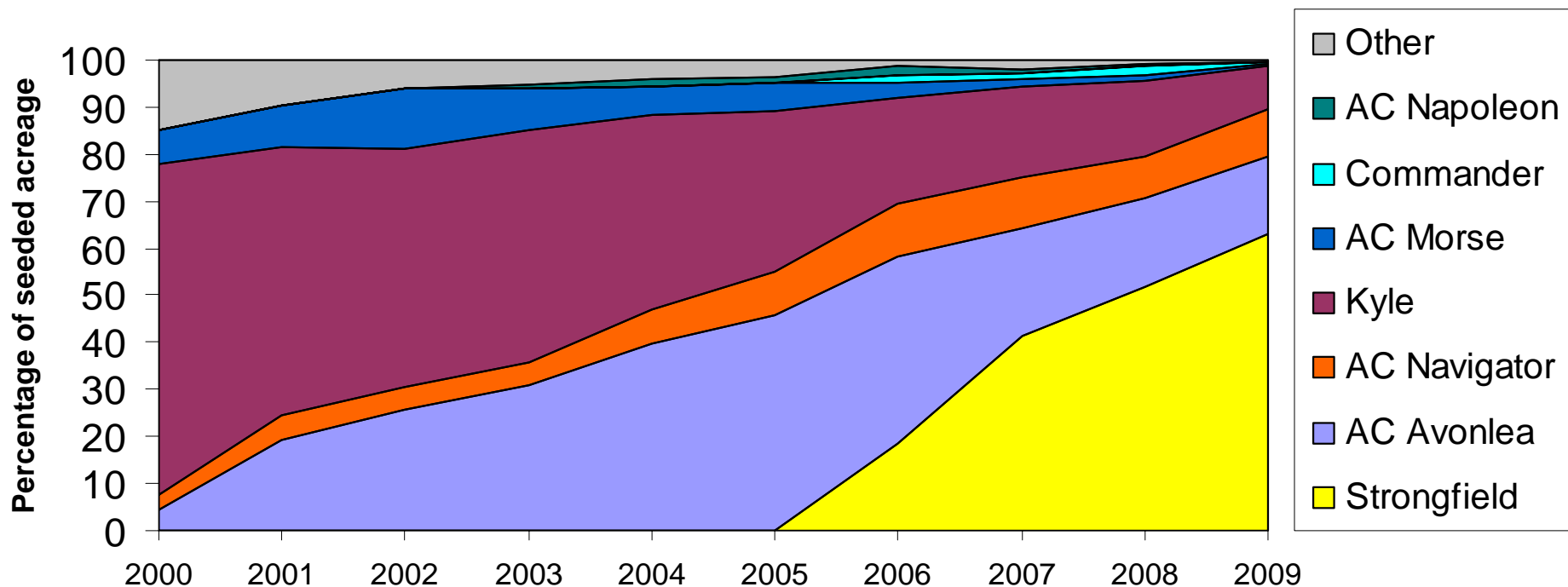
- Carberry Good for FHB, VG for leaf disease, late
- Muchmore High yield, P for FHB, VG for leaf rust, late
- Shaw Midge Tolerant
- Plus 4 more, names pending

2010 Manitoba Seed Guide Variety Descriptions

Variety	Days to Maturity	Height	Resistance to:								
			Lodging	Sprouting	Loose Smut	Bunt	Leaf Spot	Stem Rust	Leaf Rust	Stripe Rust	Fusarium Head Blight
AC Barrie~	0	M	G	G	G	F	P	G	P	P	F
McKenzie	-1	M	F	G	P	VG	F	VG	VG	P	F
Superb~	2	M	VG	G	F	VG	P	VG	VP	P	P
Lillian	0	M	F	G	F	G	P	G	VG	G	VP
Harvest~	-1	M	VG	VG	G	F	P	VG	G	—	VP
KANE~	1	M	G	VG	P	P	F	G	VG	—	F
CDC Go	-1	SD	G	P	P	F	VP	VG	F	—	P
Infinity~	-2	M	G	G	G	F	P	G	VG	P	VP
CDC Imagine~	0	M	G	F	G	VG	P	G	F	—	VP
5602HR~	1	M	F	F	VG	VG	F	VG	VG	—	G
CDC Abound~	2	—	G	F	F	VG	P	VG	P	G	VP
Alvena~	-2	M	G	F	G	P	—	G	F	F	P
Goodeve VB~	-2	M	VG	G	G	P	P	G	G	F	VP
Unity VB~	0	M	F	G	P	VG	F	VG	VG	—	P
Fieldstar VB ~	0	M	F	G	F	F	F	G	VG	G	F
Waskada~	1	M	F	G	G	VG	P	VG	F	G	G
5603HR~	2	M	G	VG	P	F	G	G	VG	—	F
WR859 CL~	0	M	G	G	VG	VG	P	G	VG	—	G
Stettler~	1	M	G	G	VG	G	P	G	P	—	P
Glenn~	2	SD	VG	F	F	F	F	VG	VG	—	F
Carberry~	2	SD	VG	F	G	VG	P	G	VG	—	G
Muchmore~	2	SD	VG	F	G	VG	P	VG	VG	—	P
Shaw VB	1	MT	G	G	P	G	P	VG	G	—	P
BW 878	-1	M	G	G	P	F	P	VG	VG	—	F
BW 880	0	M	G	VG	G	VP	F	VG	G	—	P
BW 881	1	M	G	F	VG	F	P	G	G	—	F
BW 883	-1	M	G	VG	P	VP	F	G	VG	—	P

# CWB Variety Survey 2000-2009

## CWAD - Prairies

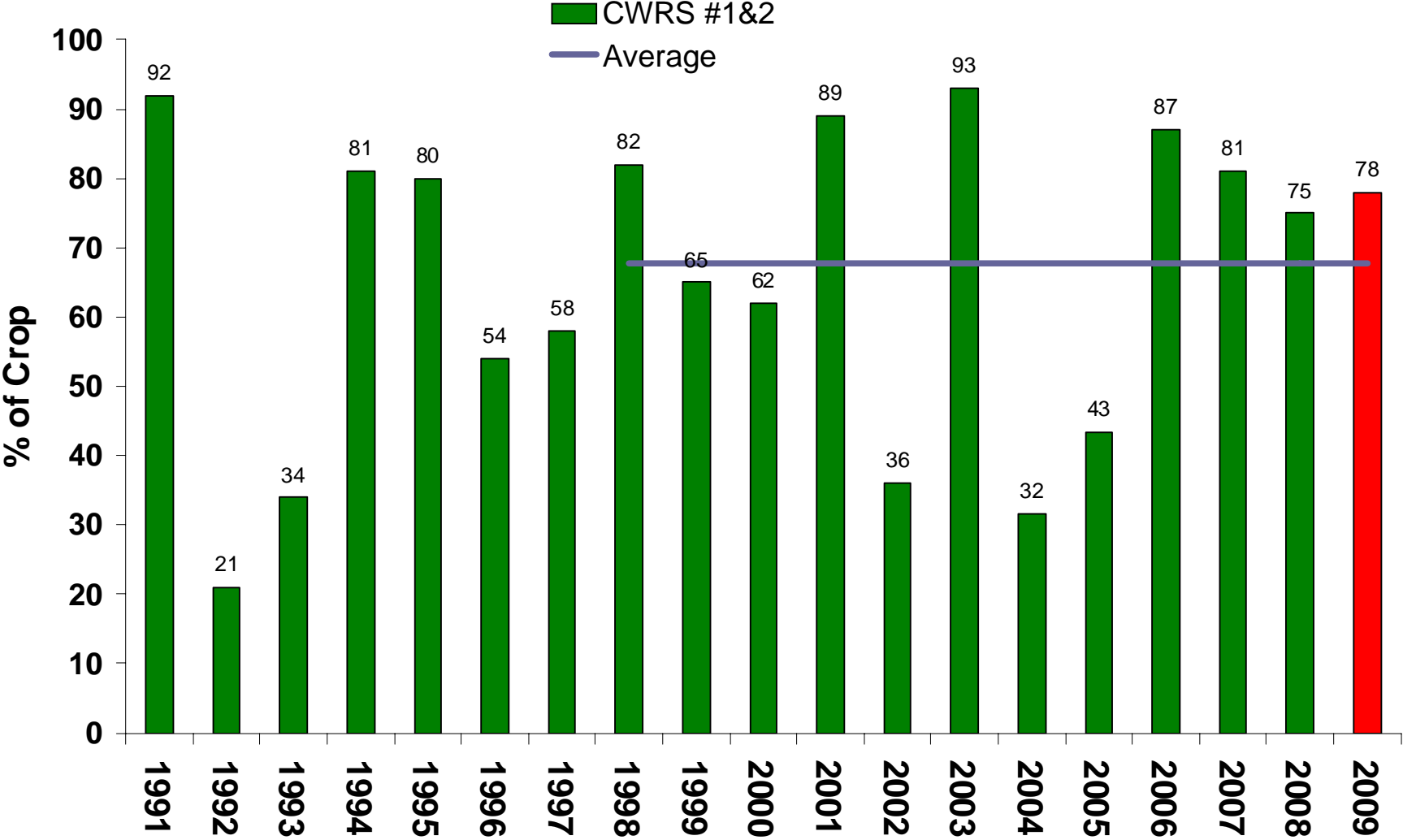


New: CDC Verona 2011  
 Enterprise 2012  
 Brigade 2011  
 Eurostar 2011

Market testing as extra strong type  
 Market testing as extra strong type



### Per cent of CWRS Grading #1 and 2



# 2009 CGC Harvest Survey Report

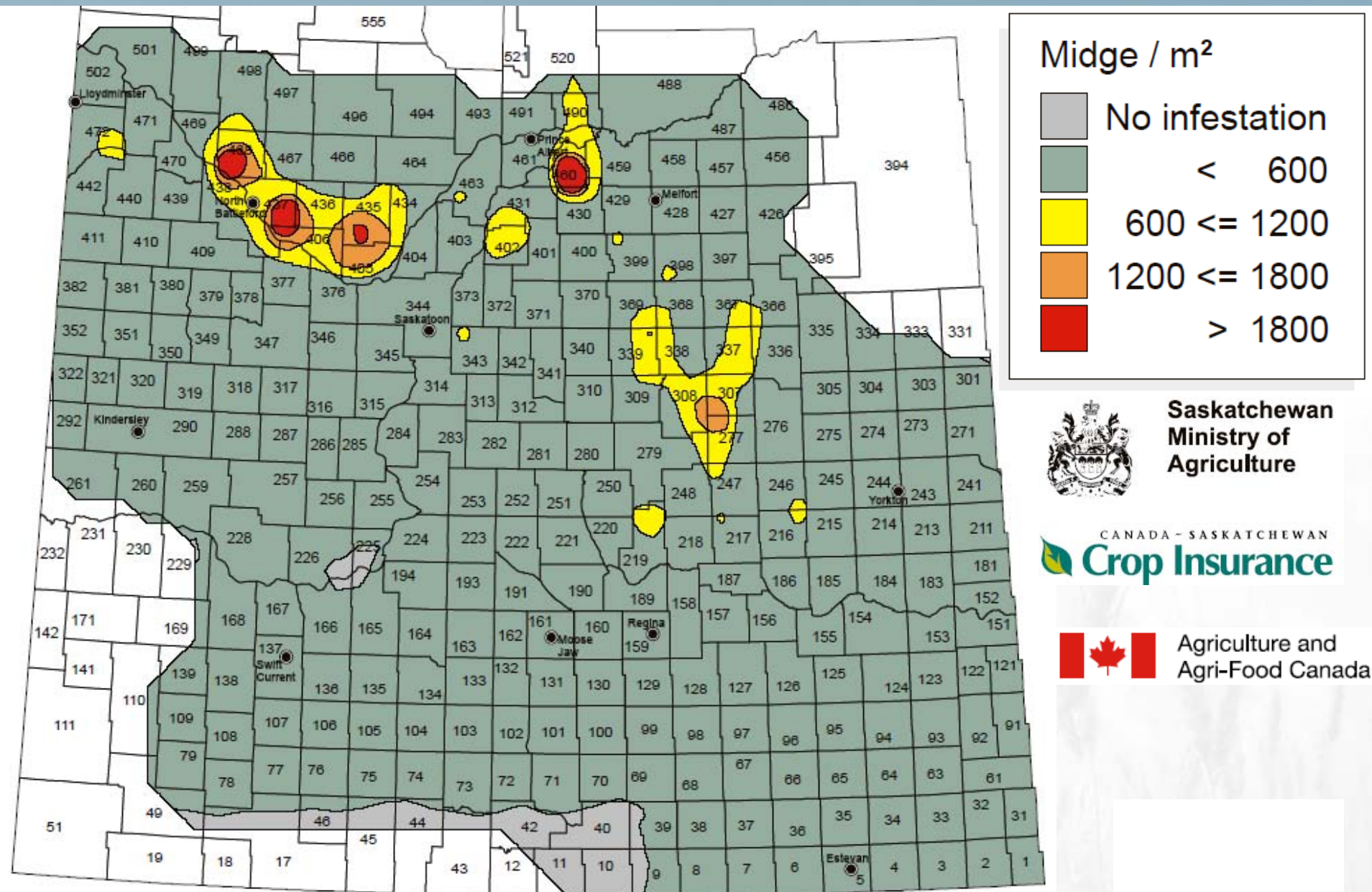
Down Grading Factor	Prairies	Manitoba	Saskatchewan	Alberta
Fusarium	11.9	31.6	7.0	3.2
Mildew	8.3	12.1	6.5	7.5
Green	6.1	6.7	3.7	8.5
Ergot	5.4	7.7	7.0	2.0
Immature	5.2	6.5	4.0	5.8
Frost	3.7	0.7	1.8	8.0
Midge	1.1	0.4	1.7	1.1
# of Samples	3246	817	1302	1127
% Grading 1&2s	89	80	93	91

High grade pattern with low downgrading damage due to insect or disease pests.

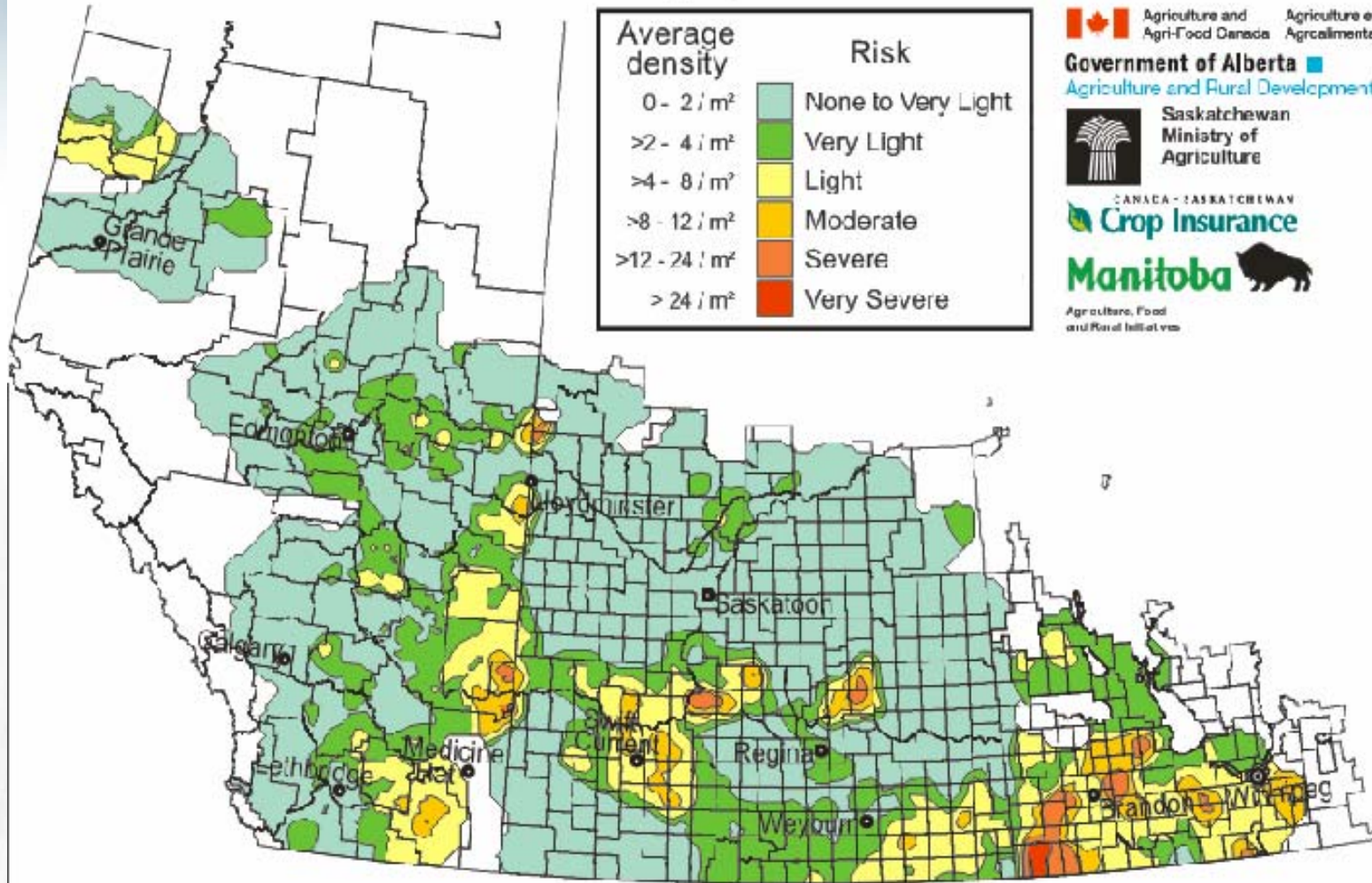




# Wheat Midge Forecast 2010



# 2009 Grasshopper Forecast



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada

Government of Alberta

Agriculture and Rural Development



Saskatchewan Ministry of Agriculture

CANADA - SASKATCHEWAN  
Crop Insurance

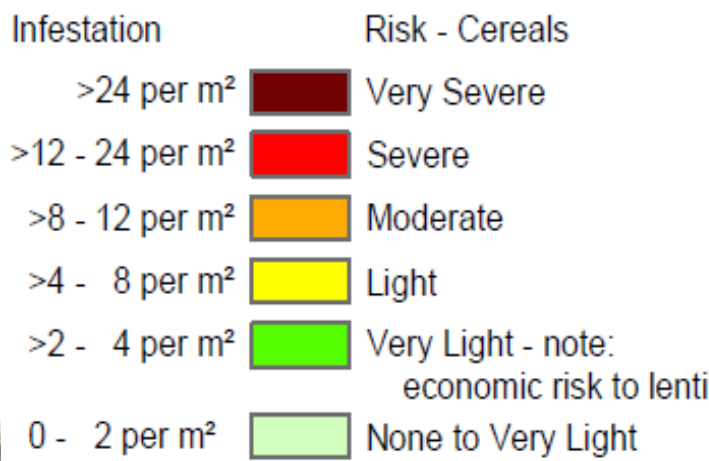
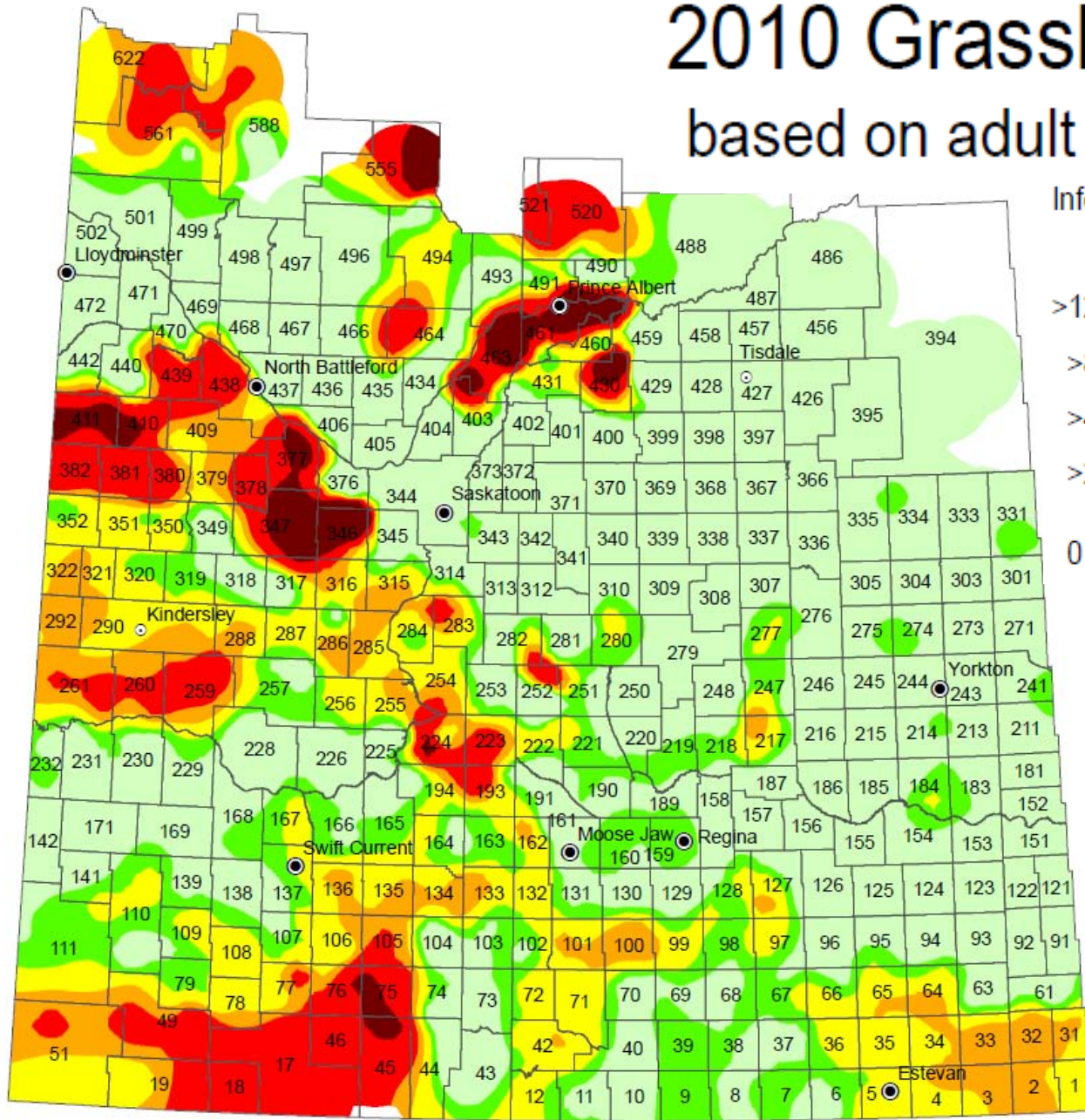
Manitoba



Agriculture, Food and Rural Initiatives

# 2010 Grasshopper Forecast

## based on adult grasshopper counts

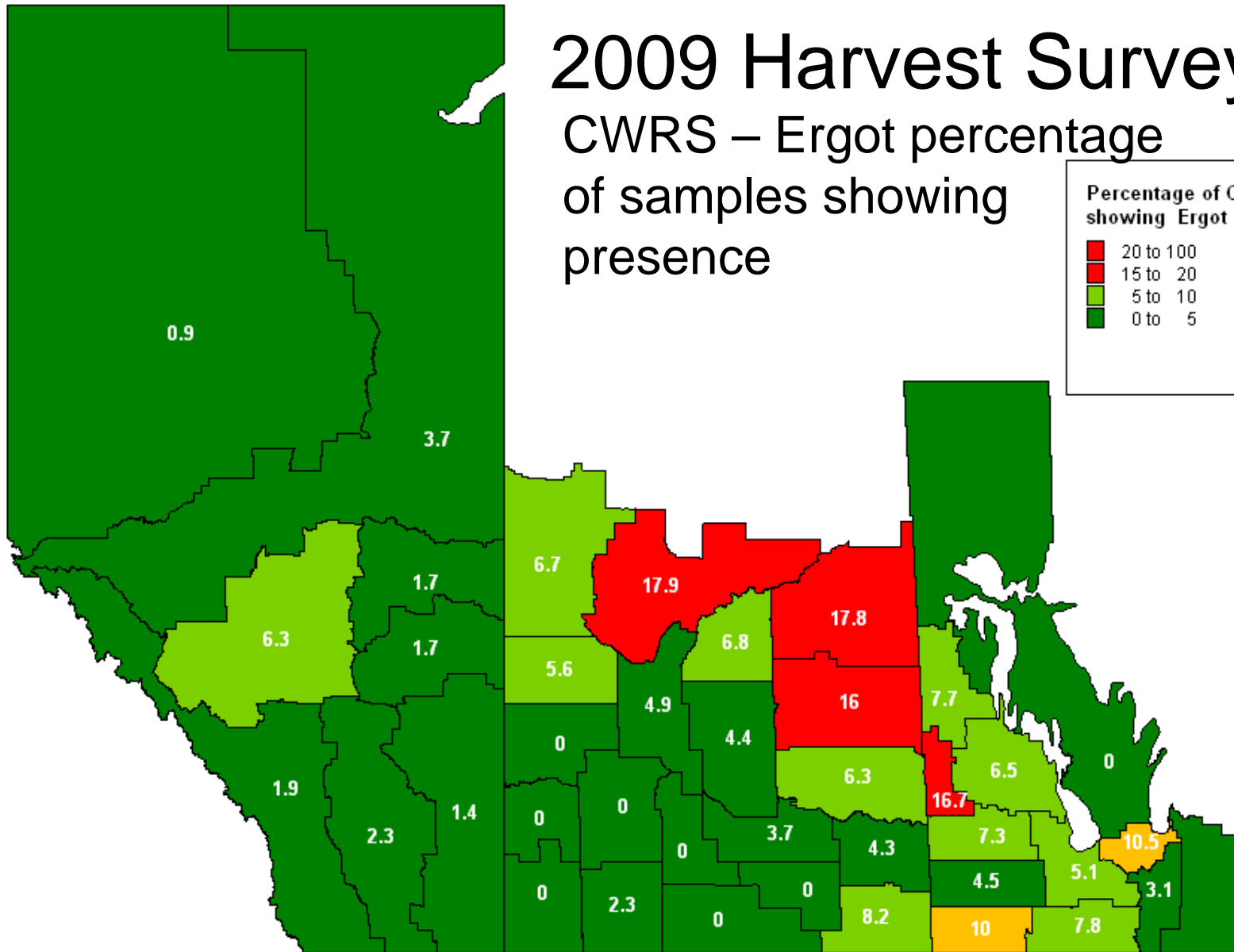
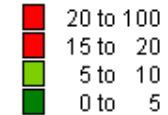




# 2009 Harvest Survey

CWRS – Ergot percentage  
of samples showing  
presence

Percentage of CWRS samples  
showing Ergot Damage



Data from Canadian Grain Commission



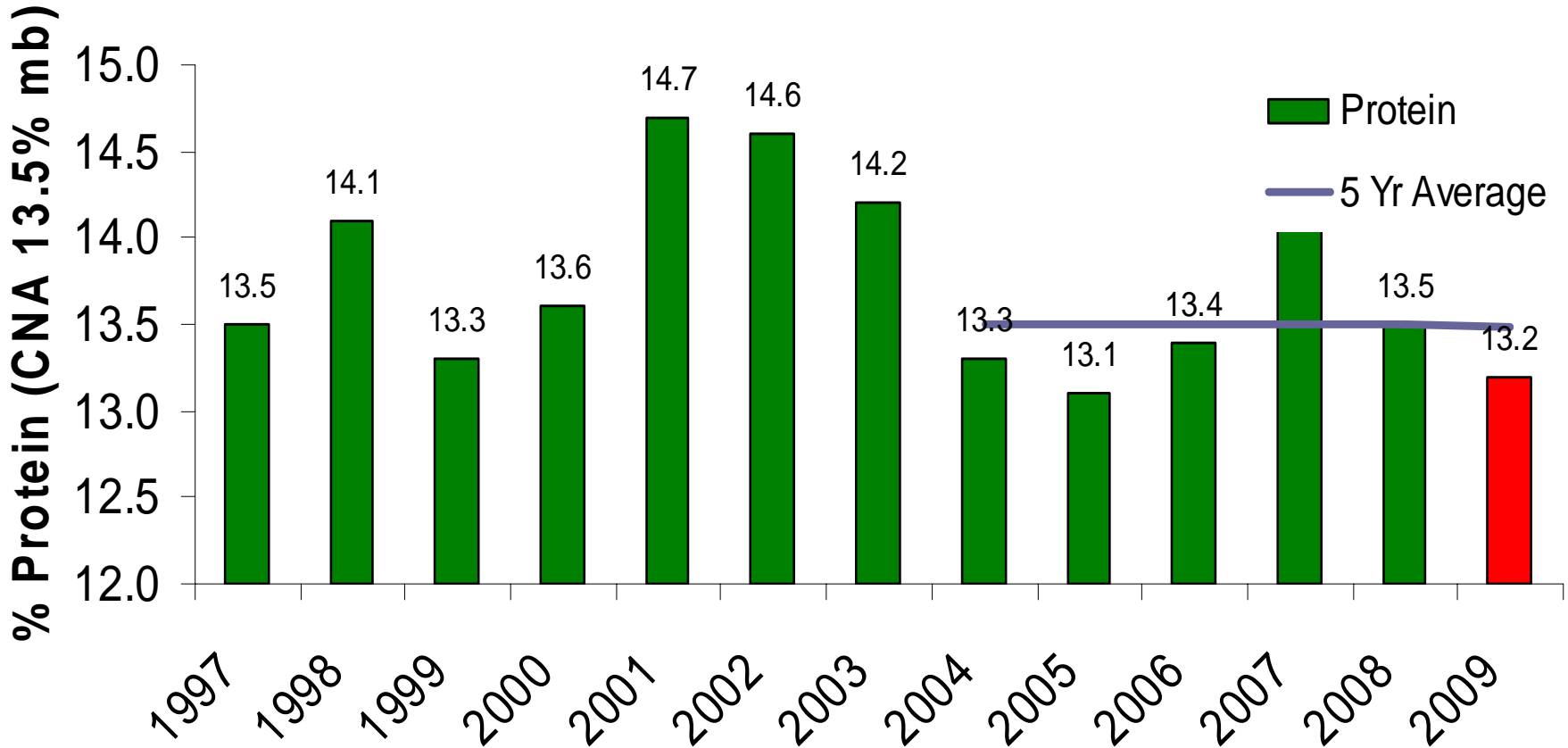
**Figure 8-4. Ergot; germinated sclerotium.**



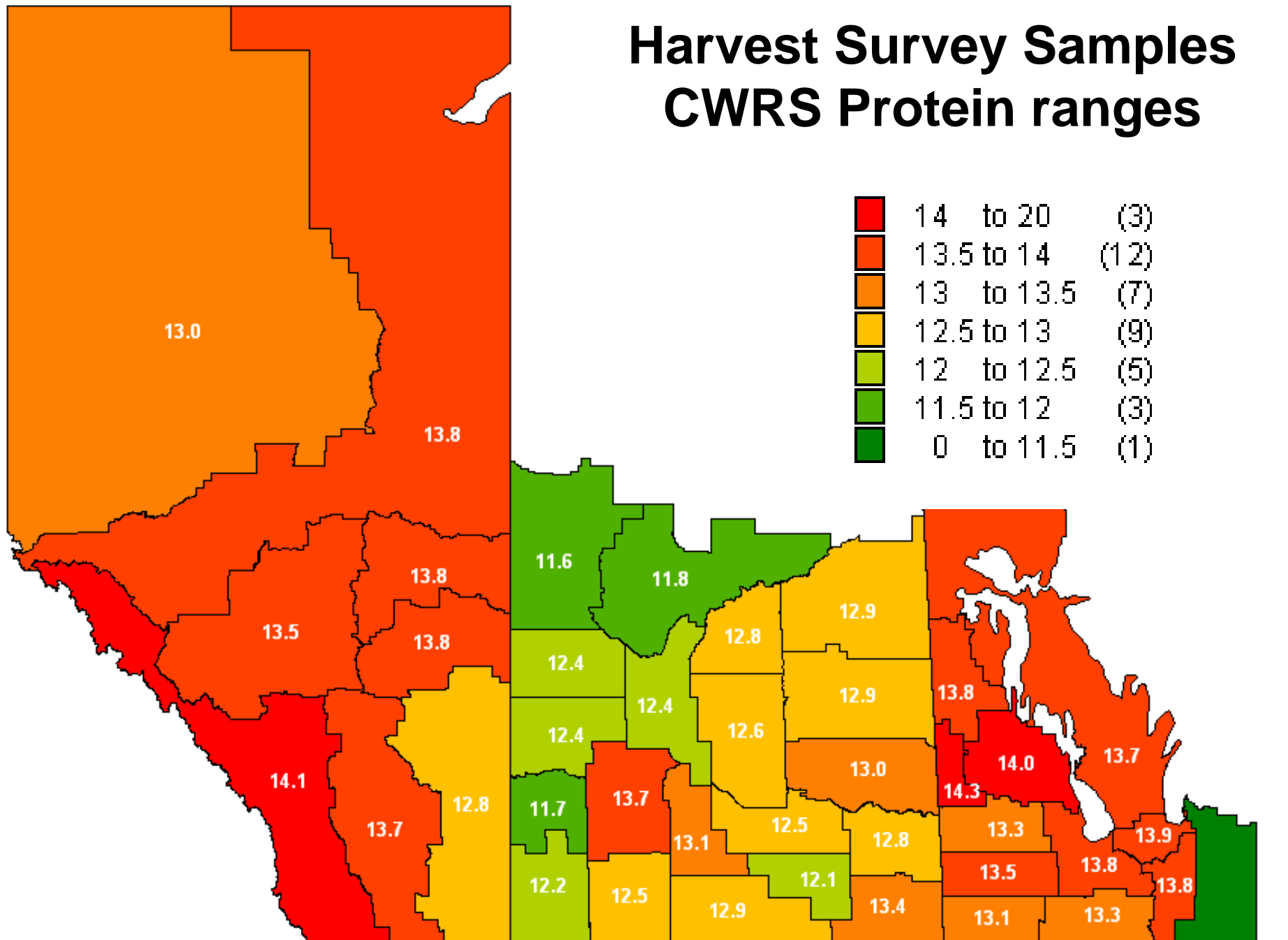




# CWRS Protein Content

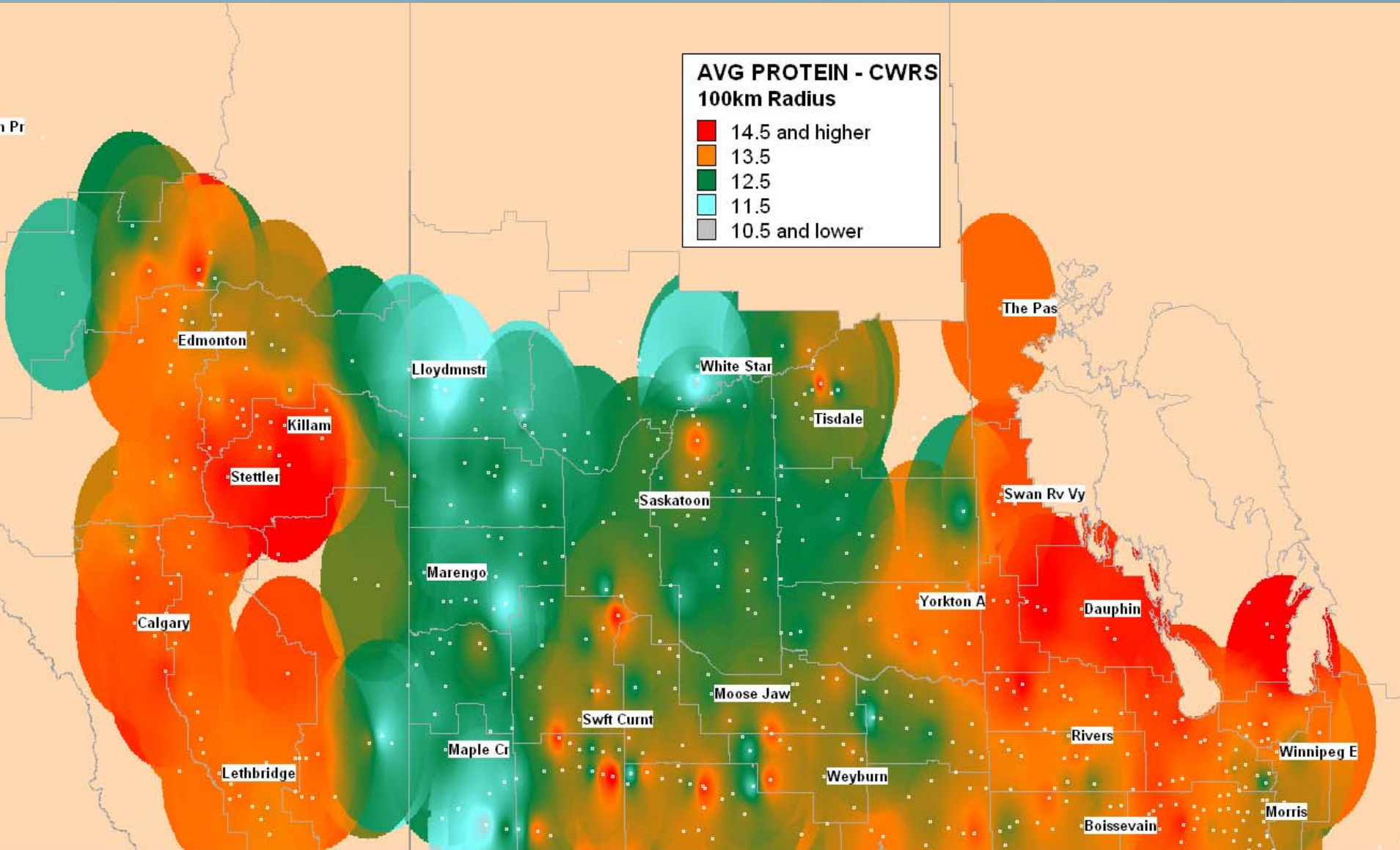


# Harvest Survey Samples CWRS Protein ranges

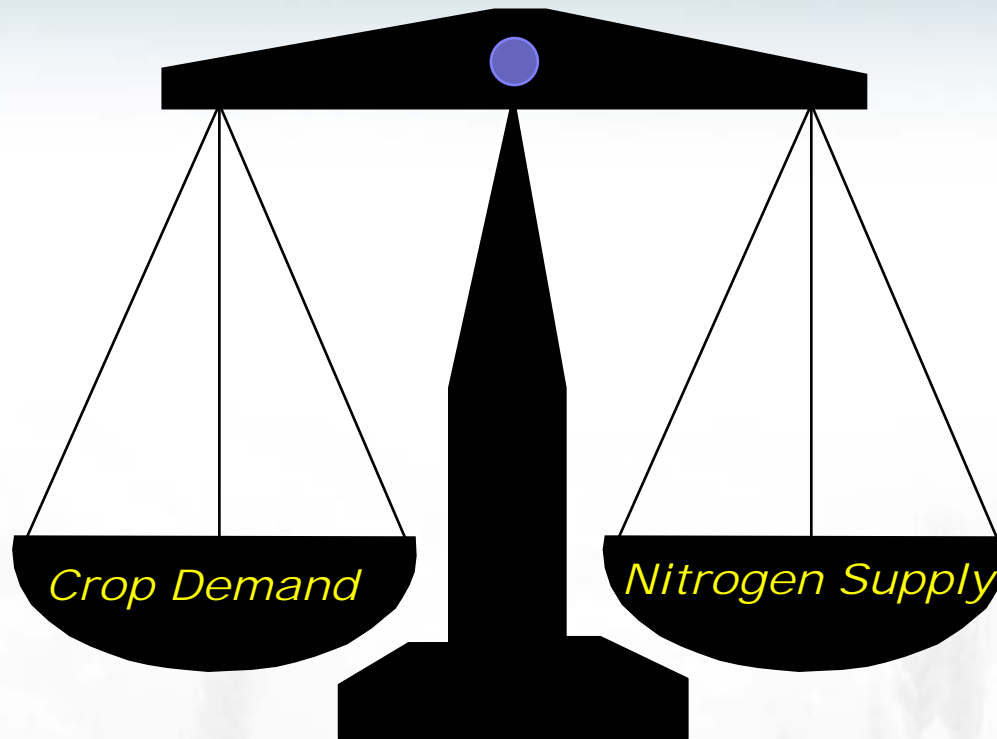


14 to 20	(3)
13.5 to 14	(12)
13 to 13.5	(7)
12.5 to 13	(9)
12 to 12.5	(5)
11.5 to 12	(3)
0 to 11.5	(1)

# Average Protein for Canada Western Red Spring (CWRS)

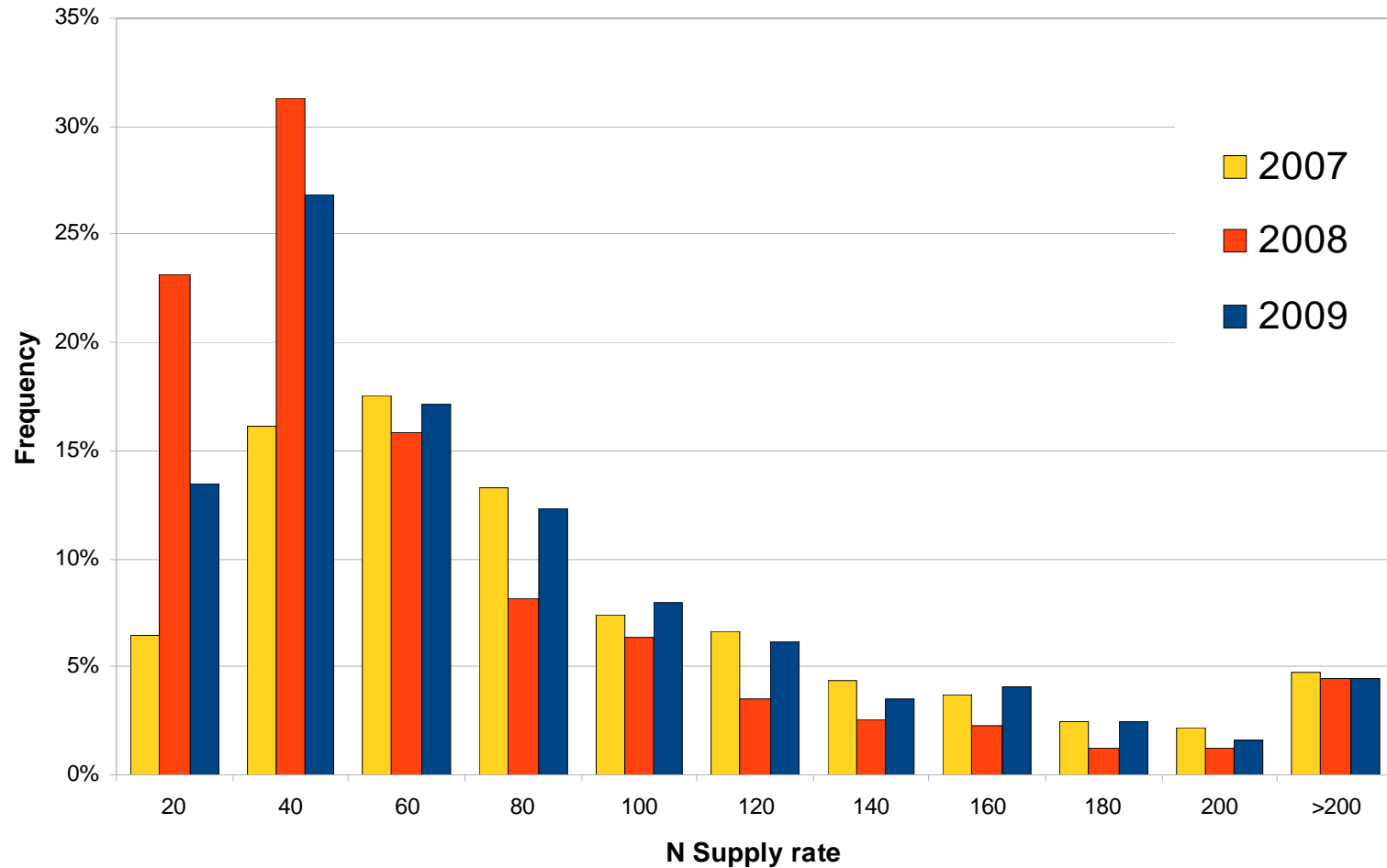


# Balance Crop Demand with Nitrogen Supply



**Fertilization = Crop demand - Soil Supply**

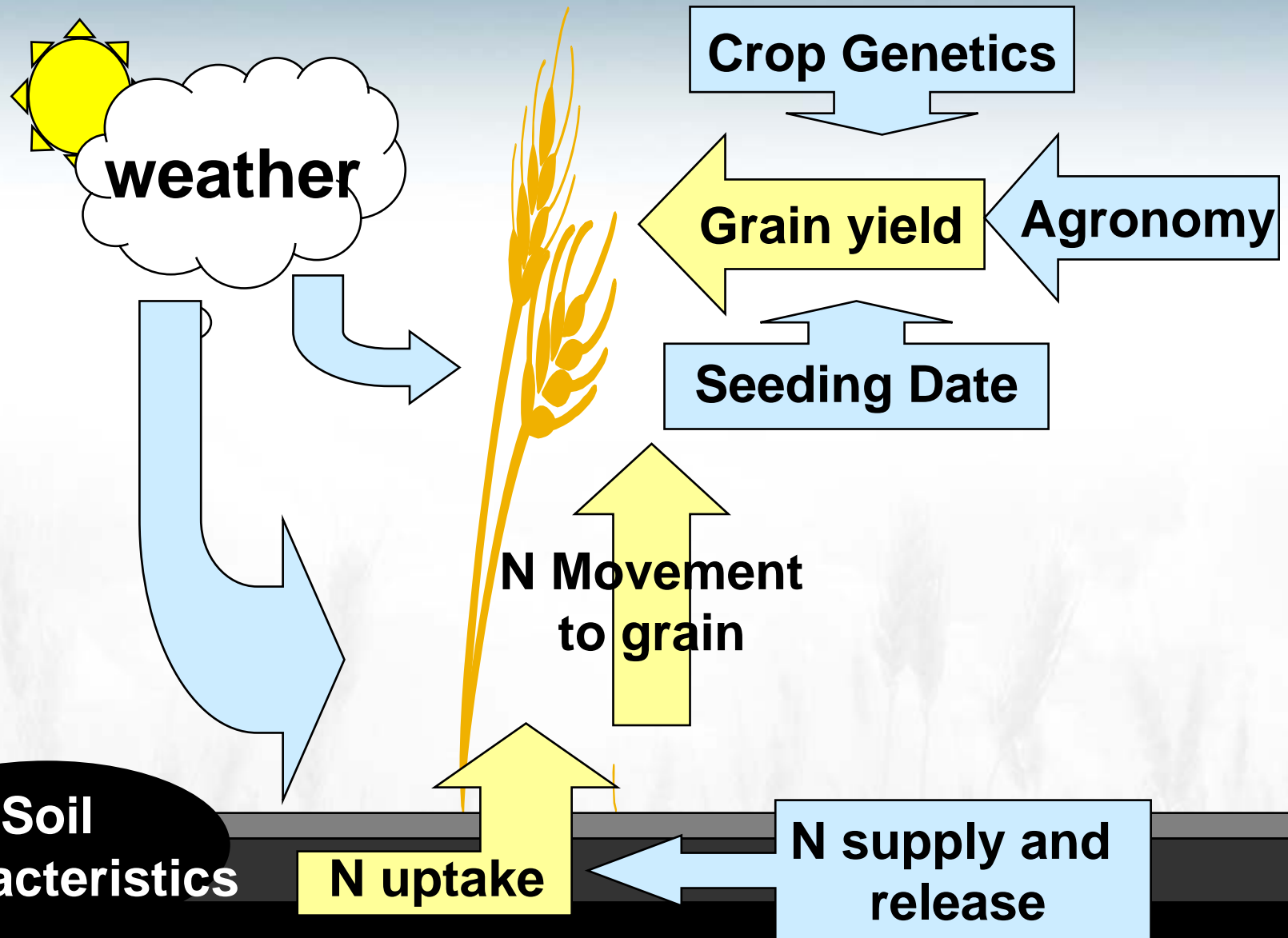
# Comparison of fall soil N sample results for west-central Saskatchewan 2007 to 2009



Courtesy of Western Ag Labs



# Factors Affecting Protein Content of Wheat



# *Acknowledgements*

- Dr. Cynthia Grant, Agriculture and Agri-Food Canada, Brandon Research Centre
- Scott Hartley, Provincial Insect Specialist, Saskatchewan Ministry of Agriculture
- Edgar Hammermeister, Wester Ag Labs