

# Crop Investigations

Verner Site

# 2013



**New Liskeard Agricultural Research Station**  
**Report 13-1**  
**April 2013**

John Kobler, Agronomy Technician

Tom Beach, RSO Manager, U of G

New Liskeard Agricultural Research Station  
Box 6007 New Liskeard ON P0J 1P0  
Voice (705) 647-8525 Fax (705) 647-8685  
Email: [john.kobler@uoguelph.ca](mailto:john.kobler@uoguelph.ca)  
Email: [tbeach@uoguelph.ca](mailto:tbeach@uoguelph.ca)

Website: <http://nlars-public.sharepoint.com>

# Verner Site

## Crop Investigations near Verner for 2013

This project was initiated in 1988 to address expressed needs for research data obtained from the Verner area. This project has been a cooperative venture between the West Nipissing Soil and Crop Improvement Association and the New Liskeard Agricultural Research Station, University of Guelph.

## The site

The current site was initially used in 2007 and in 2008. Due to wetness and other factors the site was not used in 2009. Improvements to surface drainage were made and the land was levelled during 2009. The site has been used successfully since 2010. The current site is located at concession III Lot 9 of Caldwell Township, Nipissing District south of Verner on highway 64. The soil type is Wolf silt loam. There appears to be some underdrainage of which the spacing pattern of the current drainage system are not known. There is also a rock outcrop on the northwest side of the site. The south and east sides are bounded by drainage ditches.

## The Weather

For most of Northern Ontario moisture was not a limiting factor for achieving maximum crop production for the 2013 growing season. A abundance of moisture was apparent during the spring and through the our planting. The summer growing season was followed with average temperature and slightly above average amount of precipitation. All in all, the cereal crops performed well under the good growing conditions.

Local weather data was collected courtesy of Gerald Beaudry. We also used a small Hobo® data logger at the field location for redundancy and to cross check the weather data. Once again, many thanks to Gerald for recording the weather and advising us of the field conditions at the Verner site.

A detailed representation of the weather conditions are included near the end of this report.

## Seeding Notes

All seeding was achieved on **14<sup>th</sup> of May** of 2013.

Based on soil tests the Verner site was notably low in P & K. All cereal crops received (8-32-16) @ 200 kg/ha (180 lbs/ac) with this fertilizer being placed with the seed through the seed drill.

Followed with (34-0-0) @ 205 kg/ha (185 lbs/ac) top dress. (*Note: The recommended rate for N on spring cereals is 70 N actual*)

The canola crops received (11-52-0) @ 215 kg/ha (194 lbs/ac) of mini map placed with the seed through the seed drill. The Canola crops also received (0-0-60) @ 250 kg/ha (225 lbs/ac) top dress. And (34-0-0) @ 294 kg/ha (264 lbs/ac) top dress. (*Note: The recommended rate for N on spring canola is 120 N actual*)

The small soybeans performance also received (8-32-16) @ 200 kg/ha (180 lbs/ac) with this fertilizer being placed with the seed through the seed drill. The fertilizer effects are very notable in the yield data. Yields were higher in Verner than in New Liskeard were no fertilizer was applied.

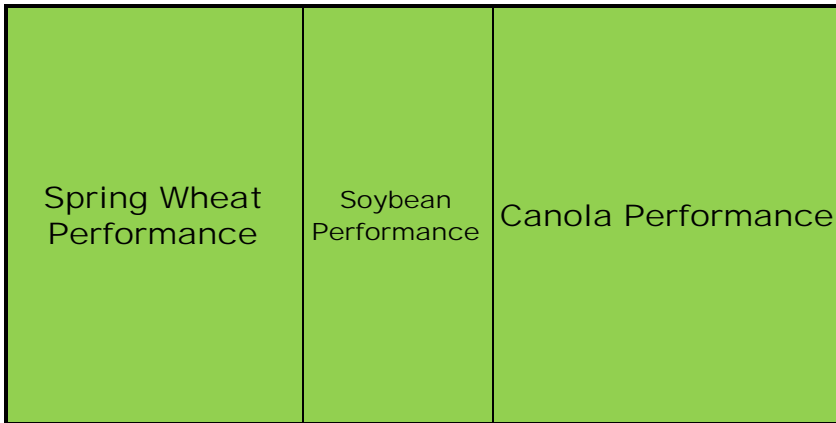
The canola performance test was subject to high Flea Beetle and Swede Midge pressure. Although the canola performance data had a CV below 20% the data was not used by the OOPSCC committee because the yields were too low.

A small Quinoa trial was also seeded in Verner, however the seed had a very poor germination rate with no plant establishment being observed. The test was cancelled.

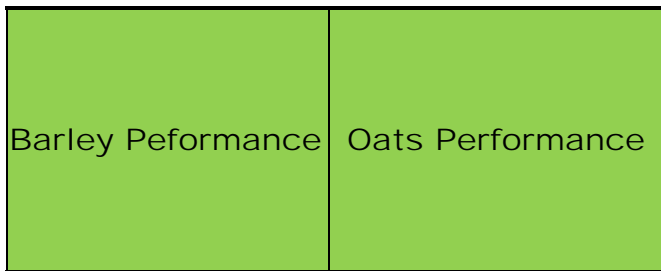
# Verner 2013



Range 2



Range 1



Highway 64



# Summary 2013

Month	Air Temperature			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units (CHU)
	Avg °C	Min °C	Max °C			
May	13	-2	29	83	237	412
June	16	2	31	69	341	570
July	20	5	36	91	451	683
August	18	5	31	110	398	638
September	13	-2	26	67	234	235
Total				419	1662	2537

Day	Air Temp - 1			Air Temp - 2			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units
	Avg °C	Min °C	Max °C	Avg °C	Min °C	Max °C			
1	18	13	25	11	25	0.6	14	23	
2	18	9	28	8	27		13	21	
3	19	9	27	8	26		13	20	
4	18	7	27	7	26		12	18	
5	17	5	27	6.0	27.0		11	17	
6	17	4	27	5.0	26.0		11	16	
7	17	2	28	3.0	25.0		10	16	
8	18	3	29	3.0	26.0	0	11	16	
9	14	6	18	11.0	18.0	0	7	12	
10	3	1	5	1.0	5.0	11	0	0	
11	9	4	15	3.0	17.0	0.2	5	7	
12	3	1	7	3.0	6.0	2.4	0	0	
13	5	-1	12	0.0	12.0	0	0	3	
14	7	-2	14	-2.0	15.0	0	1	6	
15	14	7	23	0.0	22.0	0	10	17	
16	10	2	14	6.0	13.0	0	3	6	
17	12	-2	22	0.0	22.0	0	5	14	
18	14	1	25	2.0	25.0	0	8	15	
19	15	9	22	10.0	23.0	3.2	11	18	
20	14	12	19	10.0	17.0	14	10	18	
21	13	11	15	12.0	14.0	18.8	8	13	
22	13	12	15	12.0	14.0	15.6	9	14	
23	5	3	12	4.0	5.0	9.6	2	3	
24	6	1	12	2.0	13.0	0	1	3	
25	8	0	15	1.0	13.0	0	3	7	
26	11	1	19	3.0	19.0	0	5	12	
27	12	0	22	0.0	24.0	0	6	14	
28	14	2	23	2.0	23.0	0	8	15	
29	16	13	21	12.0	22.0	6.8	12	20	
30	19	8	27	8.0	28.0	0	12	19	
31	21	15	27	14.0	28.0	0	16	26	
Min	2.6	-2.0	5.0	0.0	-2.0	5.0	0	0.0	0.0
Max	21.3	15.2	29.1	0.0	14.0	28.0	19	16.2	25.9
Avg	12.9	5.0	20.1	#DIV/0!	5.3	19.5	3	7.7	13.3
Sum							83	237.2	411.7
Days With Precipitation							10		

Weather records courtesy of Gerald Beaudry  
 Air Temp 1 - From Hobo Data Logger Nipissing University  
 Air Temp 2 - From Min-Max Thermometer

Day	Air Temp - 1			Air Temp - 2			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units
	Avg °C	Min °C	Max °C	Avg °C	Min °C	Max °C			
1	19	16	22				8	14	24
2	14	8	20				8.2	9	16
3	11	6	14				0	5	8
4	12	3	20				0	7	13
5	11	3	19				0	6	12
6	15	7	22				0	9	16
7	14	7	20				0	9	15
8	16	9	22				0	10	18
9	18	8	28				0	13	20
10	16	9	22				5	11	19
11	19	14	24				3	14	24
12	17	11	24				16.2	12	21
13	16	10	23				0	12	20
14	15	8	22				0	10	17
15	16	5	26				0	10	16
16	14	10	19				15	10	17
17	13	7	18				0.2	7	13
18	13	7	21				0	9	15
19	14	2	22				0	7	14
20	14	5	22				0	8	14
21	17	10	24				0	12	20
22	18	16	21				6.4	13	24
23	20	16	27				5.6	16	26
24	23	16	29				0	18	27
25	22	15	28				0	17	26
26	23	15	31				0	18	26
27	21	16	26				0.2	16	27
28	18	14	23				0.4	13	23
29	17	11	24				0	13	21
30	18	9	27				0	13	20
Min	10.8	2.0	14.5	0.0	0.0	0.0	0	5.3	8.2
Max	23.2	16.4	30.7	0.0	0.0	0.0	16	18.0	26.9
Avg	16.5	9.8	23.0	#DIV/0!	#DIV/0!	#DIV/0!	2	11.4	19.0
Sum							69	341.4	569.5
Days With Precipitation							13		

Weather records courtesy of Gerald Beaudry  
 Air Temp 1 - From Hobo Data Logger  
 Air Temp 2 - From Min-Max Thermometer



Day	Air Temp - 1			Air Temp - 2			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units
	Avg °C	Min °C	Max °C	Avg °C	Min °C	Max °C			
1	17	9	24				0	12	20
2	17	7	28				0	12	19
3	22	13	29				0	16	24
4	22	15	28				0	17	26
5	21	12	30				0	16	23
6	23	13	31				0	17	24
7	22	13	32				2	18	24
8	19	13	26				0	14	24
9	23	16	31				0	19	27
10	22	15	27				2	16	26
11	17	10	24				0	12	20
12	19	6	30				0	13	18
13	20	7	30				0	13	19
14	22	8	32				0	15	20
15	25	12	35				0	19	22
16	26	16	36				0	21	25
17	26	19	35				32	22	29
18	23	18	29				0	19	29
19	22	20	26				25	18	30
20	19	11	24				0	13	21
21	15	5	23				0	9	15
22	18	6	26				0	11	17
23	19	11	26				1	14	22
24	16	7	25				0	11	18
25	17	6	27				0	11	18
26	17	9	26				0	12	20
27	18	13	23				18	13	22
28	18	13	21				5	12	20
29	17	13	24				5	13	22
30	18	9	27				0	13	20
31	18	9	26				1	12	20
Min	15.5	4.6	21.0	0.0	0.0	0.0	0	8.9	14.8
Max	26.5	20.2	35.7	0.0	0.0	0.0	32	21.9	30.2
Avg	19.9	11.4	27.7	#DIV/0!	#DIV/0!	#DIV/0!	3	14.6	22.0
Sum							91	451.2	682.8
Days With Precipitation							12		

Weather records courtesy of Gerald Beaudry  
 Air Temp 1 - From Hobo Data Logger  
 Air Temp 2 - From Min-Max Thermometer

Day	Air Temp - 1			Air Temp - 2			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units
	Avg °C	Min °C	Max °C	Avg °C	Min °C	Max °C			
1	18	12	25				26	13	22
2	16	9	24				9	12	20
3	16	10	23				0	12	20
4	15	9	23				0	11	18
5	16	5	24				0	10	16
6	17	10	24				3	12	20
7	19	15	24				28	15	25
8	18	11	25				0	13	21
9	16	8	24				1	11	18
10	15	6	22				0	9	16
11	16	6	24				0	10	16
12	17	9	25				0	12	19
13	13	11	14				0	8	13
14	15	8	21				0	9	16
15	16	8	24				5	11	18
16	17	8	26				0	12	19
17	17	7	27				0	12	19
18	18	7	29				0	13	19
19	19	11	28				0	15	23
20	21	14	30				0.2	17	25
21	22	13	30				0	16	24
22	22	13	28				3.6	15	24
23	16	9	24				0	11	19
24	16	6	26				0	11	17
25	16	9	21				13	10	18
26	20	18	26				2	17	28
27	22	18	31				0	19	29
28	22	14	30				0	17	26
29	22	12	31				0	16	23
30	19	16	23				18	15	25
31	18	14	22				0	13	22
Min	12.8	5.4	14.5	0.0	0.0	0.0	0	7.9	12.8
Max	22.4	17.9	30.7	0.0	0.0	0.0	28	19.3	28.6
Avg	17.8	10.5	25.1	#DIV/0!	#DIV/0!	#DIV/0!	4	12.8	20.6
Sum							110	397.6	638.1
Days With Precipitation							17		

Weather records courtesy of Gerald Beaudry  
 Air Temp 1 - From Hobo Data Logger  
 Air Temp 2 - From Min-Max Thermometer

Day	Air Temp - 1			Air Temp - 2			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units
	Avg °C	Min °C	Max °C	Avg °C	Min °C	Max °C			
1	18	11	26				0	0	21
2	18	13	23				3.2	13	22
3	16	12	24				0.4	13	22
4	15	7	21				0.2	9	16
5	11	2	19				0.0	5	12
6	13	3	20				0	7	13
7	17	13	22				6	13	22
8	12	5	21				0	8	13
9	13	5	21				4.0	8	13
10	19	14	24				10	14	24
11	19	14	23				17	14	24
12	16	8	22				4	10	17
13	7	1	14				0	2	6
14	9	-2	18				0.0	3	10
15	11	5	16				9	6	0
16	7	1	14				0	2	0
17	7	-2	17				0	2	0
18	11	1	21				0	6	0
19	16	11	24				2.4	13	0
20	19	15	22				6.6	13	0
21	14	6	18				1.6	7	0
22	6	1	14				0	3	0
23	7	-1	17				0	3	0
24	9	-2	22				0	5	0
25	12	0	25				0	8	0
26	13	2	26				0	9	0
27	14	5	24				0	10	0
28	15	5	24				0	10	0
29	15	12	20				2.8	11	0
30	13	8	18				0	8	0
								0	0
Min	6.5	-2.0	14.1	0.0	0.0	0.0	0	0.0	0.0
Max	19.2	14.9	26.3	0.0	0.0	0.0	17	14.2	24.0
Avg	13.1	5.8	20.7	#DIV/0!	#DIV/0!	#DIV/0!	2	7.8	7.8
Sum							67	234.2	234.7
Days With Precipitation							14		

Weather records courtesy of Gerald Beaudry  
 Air Temp 1 - From Min-Max Thermometer  
 Air Temp 2 - From Data Logger

Day	Air Temp - 1			Air Temp - 2			Precip (mm)	Growing Degree Days (5C)	Corn Heat Units
	Avg °C	Min °C	Max °C	Avg °C	Min °C	Max °C			
1	14	13	15				0	0	0
2	14	13	15				0	0	0
3	12	10	13				0	0	0
4	13	12	13				2	0	0
5	12	11	13				0	0	0
6	11	11	12				15	0	0
7	12	11	13				21	0	0
8	10	8	11				0	0	0
9	10	9	12				0	0	0
10	10	9	12				0	0	0
11	10	9	12				0	0	0
12	11	9	12				0	0	0
13	12	11	13				1	0	0
14	11	10	12				0	0	0
15	9	7	10				0	0	0
16	11	10	12				4	0	0
17	11	11	11				2	0	0
18	10	9	11				1	0	0
19	9	8	9				11	0	0
20	8	7	9				0	0	0
21	8	7	9				10	0	0
22	7	6	8				0	0	0
23	5	4	6				0	0	0
24	4	4	5				0	0	0
25	5	4	5				1	0	0
26	5	5	6				16	0	0
27	5	4	5				2	0	0
28	4	3	5				1	0	0
29	2	2	3				0	0	0
30	3	2	4				0	0	0
31	5	4	6				13	0	0
Min	1.0	2.4	2.1	0.0	0.0	0.0	0	0.0	0.0
Max	30.0	14.2	13.3	0.0	0.0	0.0	21	0.0	0.0
Avg	15.5	8.9	8.0	#DIV/0!	#DIV/0!	#DIV/0!	3	0.0	0.0
Sum							101	0.0	0.0
Days With Precipitation							18		

Weather records courtesy of Gerald Beaudry  
 Air Temp 1 - From Min-Max Thermometer  
 Air Temp 2 - From Data Logger

# Historical Weather Records Verner Site

New Liskeard Agricultural Research Station

## Accumulated Monthly Corn Heat Units (CHU)

CHU	May	Jun	Jul	Aug	Sept	Total
1989	382	578	705	622	380	2667
1990	262	534	660	628	222	2306
1991	426	589	677	666	294	2652
1992	316	464	516	507	312	2115
1993	216	452	654	674	199	2195
1994	215	568	688	541	419	2431
1995	333	617	717	731	207	2605
1996	354	611	639	651	453	2708
1997	208	580	630	536	361	2315
1998	553	600	688	704	361	2906
1999	490	654	748	645	370	2907
2000	447	572	681	662	381	2743
2001	493	614	673	709	431	2920
2002	241	599	738	682	570	2830
2003	411	573	709	711	494	2898
2004	324	533	699	608	495	2659
2005	365	683	716	700	499	2963
2006	469	602	741	639	408	2859
2007	405	583	631	629	253	2501
2008	298	629	695	643	456	2721
2009	325	556	648	623	461	2613
2010	463	589	755	718	394	2919
2011	435	605	785	659	231	2715
2012	439	621	692	689	353	2794
2013	397	658	837	638	235	2765
Avg 89-13	371	587	693	649	370	2668
Min	208	452	516	507	199	2115
Max	553	683	837	731	570	2963

Notes: CHU are for May 1 to first <-2°C

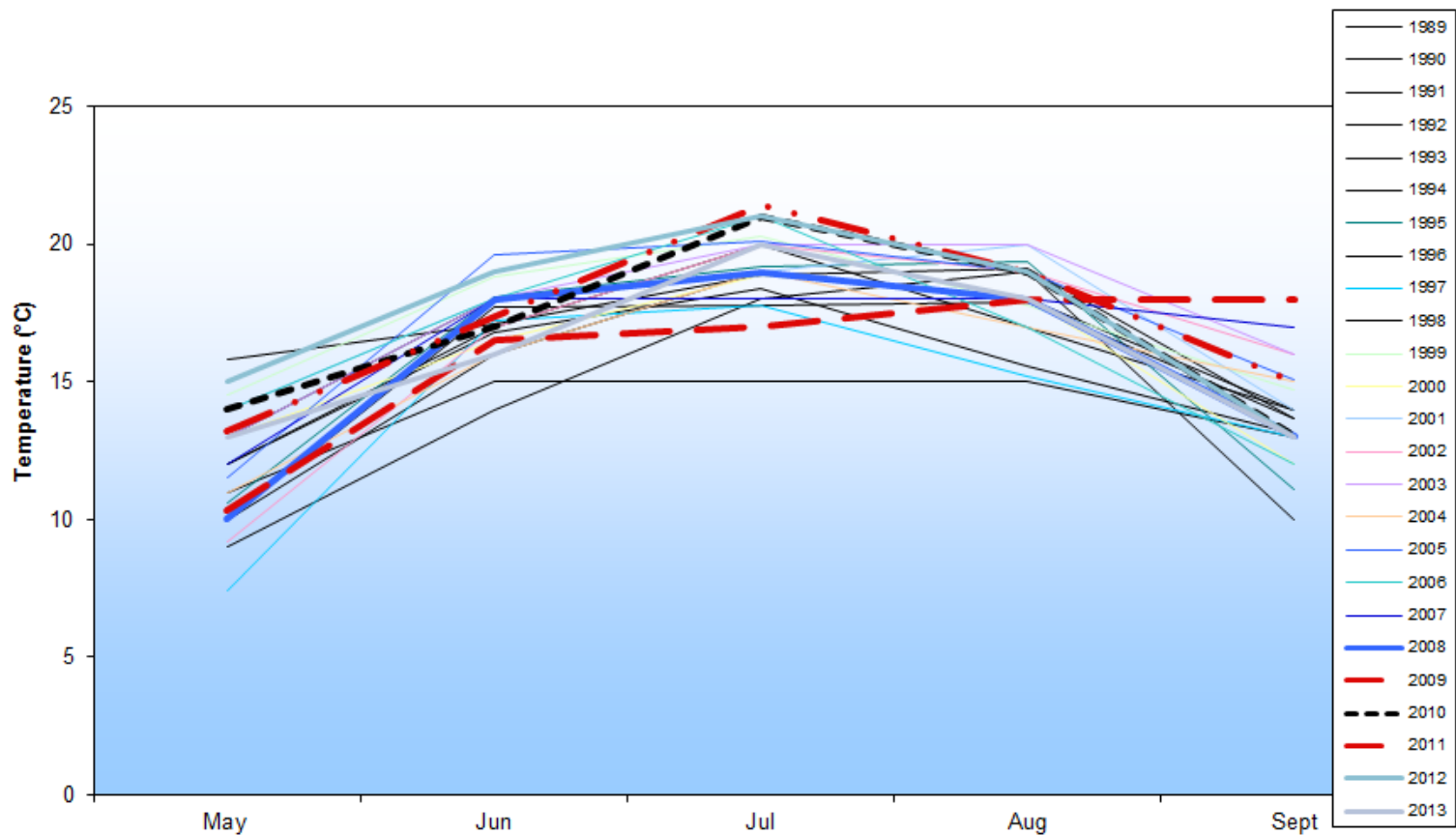
*Accumulated Monthly Precipitation (mm)*

Precip	May	Jun	Jul	Aug	Sept	Total
1989	81	48	47	71	22	269
1990	157	96	76	28	61	418
1991	88	21	81	59	91	340
1992	35	54	54	55	88	286
1993	93	59	75	79	92	398
1994	54	95	10	158	82	399
1995	147	36	173	56	104	516
1996	53	52	121	50	110	386
1997	102	46	118	122	80	468
1998	33	159	22	49	82	344
1999	66	114	140	72	116	508
2000	83	91	88	107	73	442
2001	105	46	38	100	142	431
2002	61	90	44	30	74	299
2003	78	89	66	170	113	516
2004	176	54	102	72	35	439
2005	26	75	41	75	97	314
2006	86	47	63	62	113	371
2007	36	59	117	84	0	296
2008	92	162	102	73	78	507
2009	83	56	118	75	29	361
2010	37	103	38	90	185	453
2011	25	99	9	27	60	220
2012	9	127	47	80	84	347
2013	83	69	91	110	67	420
Avg 89-13	76	78	75	78	83	390
Min	9	21	9	27	0	220
Max	176	162	173	170	185	516

Average Monthly Air Temperature (°C)

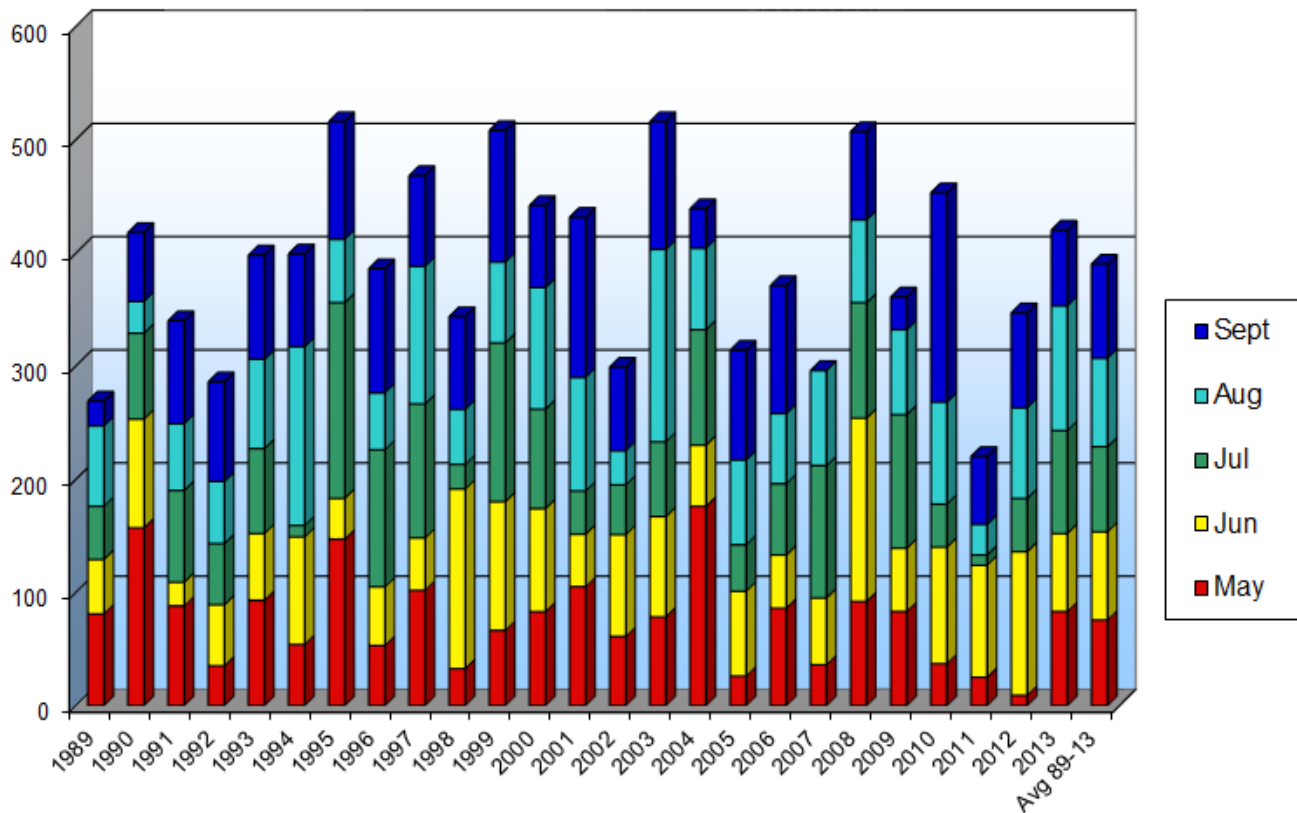
AirT	May	Jun	Jul	Aug	Sept
1989	12	17	20	17	14
1990	10	16	19	18	13
1991	13	18	19	18	14
1992	11	15	15	15	13
1993	9	14	18	19	10
1994	12	17	18	16	13
1995	11	18	19	19	11
1996	10	18	18	18	14
1997	7	17	18	15	13
1998	16	17	19	19	14
1999	15	19	20	18	15
2000	13	17	19	18	12
2001	14	18	19	20	14
2002	9	17	20	19	16
2003	13	18	20	20	16
2004	11	16	19	17	15
2005	12	20	20	19	15
2006	14	18	21	17	12
2007	12	18	18	18	17
2008	10	18	19	18	13
2009	10	17	17	18	18
2010	14	17	21	19	13
2011	13	17	21	19	15
2012	15	19	21	19	13
2013	13	16	20	18	13
Avg 89-13	12	17	19	18	14
Min	7	14	15	15	10
Max	16	20	21	20	18

**Average Air Temperatures**  
At the Verner Test Site



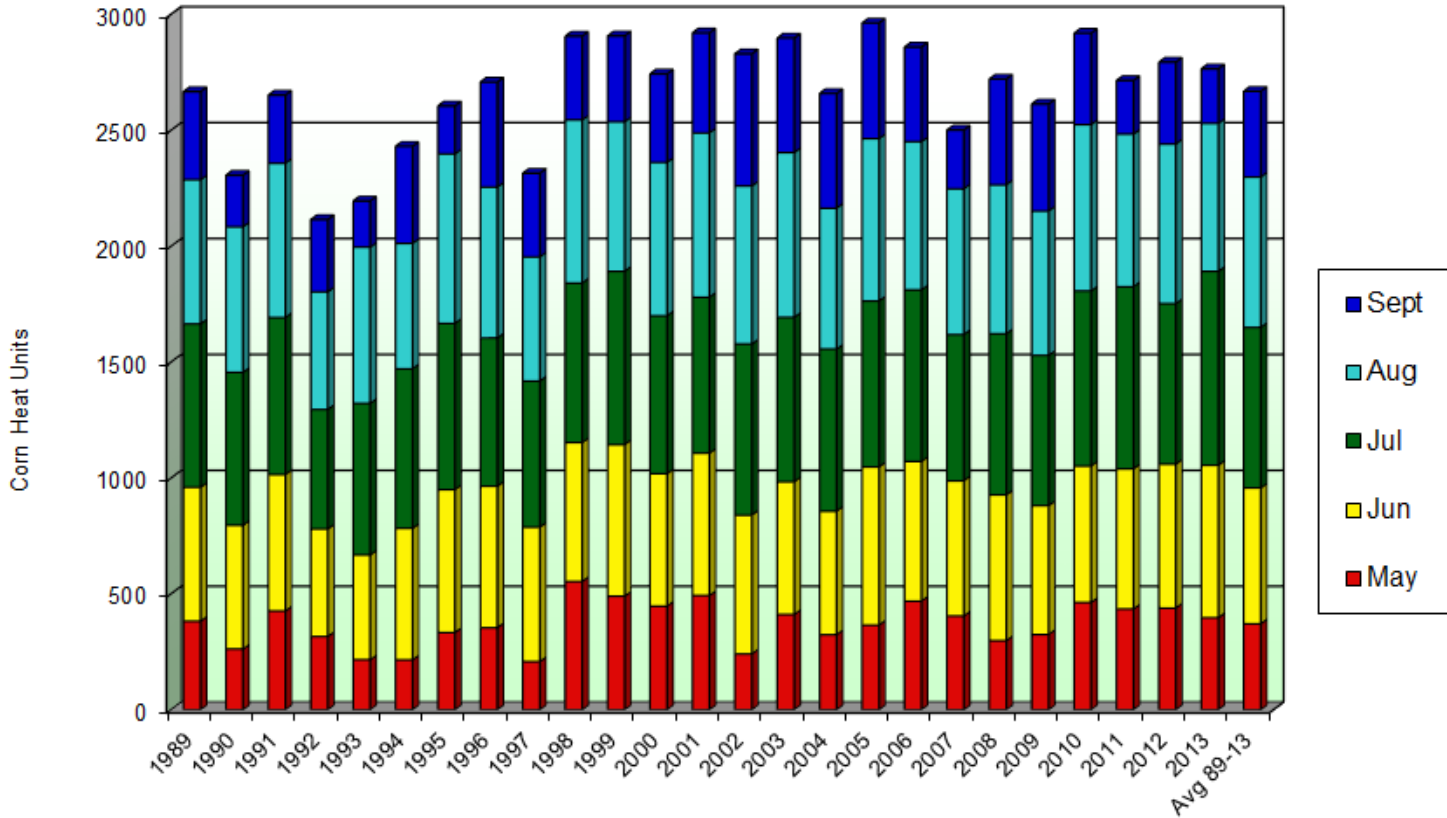


**Precipitation**  
At the Verner Test Site



# Corn Heat Unit Accumulation

At the Verner Test Site



Verner OCCC Barley Performance 2013  
 New Liskeard Agricultural Research Station  
 ( VBPT13 )

Seeded:14-May-13  
 Fertilization:70 N kg/ha  
 Herbicide:1.25 L/ha Logic M

Entry	Code	Variety	Grain kg/ha	Straw kg/ha	1000 Seed weight (g)	Test Wt. kg/hl	Lodging (0-9)	Height (cm)	Days to Head	Days to Mature	Index		Harv Adjusted	
											Grain	Straw	Grain	Straw
1	1001	AC Kings	4318.4	5102.8	46.2	58.9	5	80	56	91	97	112	97	108
2	1009	Bornholm	4898.1	4028.5	45.7	63.3	5	68	56	89	110	88	108	92
3	1034	OAC Ripley	3866.6	4565.7	40.3	57.3	5	76	54	94	87	100	89	100
4	1037	Dignity	4096.6	3849.5	41.4	55.3	5	78	56	92	92	84	93	89
5	1038	HY 481-6R	5051.2	3760.0	37.4	55.7	6	67	51	91	113	82	111	87
6	1043	SYNABELLE	4662.5	3401.9	42.7	56.0	7	80	52	91	105	75	104	82
7	1049	OCEANIK	3647.0	4565.7	38.9	53.4	3	83	55	94	82	100	85	100
8	1052	OAC Laverne	4603.8	4028.5	41.4	60.5	6	80	51	91	103	88	103	92
9	1056	Harmony	3980.0	5908.5	43.2	56.0	4	96	57	94	89	129	91	121
10	1057	Synasolis	4673.2	4834.2	39.0	54.6	4	74	58	94	105	106	104	104
11	1059	Amberly	5036.5	5998.0	45.1	56.0	6	85	58	94	113	131	111	122
12	1064	HY 101-6R	4755.3	3222.8	40.5	55.5	7	66	52	90	107	71	106	79
13	1069	Alliance	4323.1	4207.6	39.7	57.5	7	81	51	90	97	92	97	94
14	1071	HY 460-6R	4938.7	5102.8	43.3	58.4	3	69	52	94	111	112	109	108
15	1072	Pandora	4541.0	4028.5	48.2	60.4	7	69	56	94	102	88	102	92
16	1080	HY 621-6R	4713.7	3580.9	44.2	56.9	7	80	51	90	106	78	105	85
17	1084	Conestogo	4410.9	3401.9	45.7	59.5	5	72	55	87	99	75	99	82
18	1092	Bentley	4191.0	5013.3	45.8	56.3	3	81	57	91	94	110	95	107
19	1094	GB092001	3728.3	3849.5	55.1	57.1	5	65	54	89	84	84	86	89
20	1097	GB096001	4999.6	4923.8	47.3	59.5	5	71	51	90	112	108	110	106
21	1098	GB096002	4581.8	5192.3	42.1	57.2	6	73	51	94	103	114	102	110
22	1104	OS08-321	4569.6	5460.9	42.2	58.1	3	76	58	95	102	120	102	114
23	1105	GB106006	4489.0	4834.2	43.8	57.1	8	76	51	96	101	106	101	104
24	1106	GB106009	3553.0	4041.1	37.2	54.6	4	83	57	94	80	89	83	92
25	1107	OB 5447-8	4531.8	5819.0	41.3	54.0	6	82	54	92	102	127	101	120
26	1108	Chambly	4753.8	5998.0	44.4	56.5	5	78	56	94	107	131	106	122
		Average	4458.2	4566.2	43.2	57.1	5.2	76	54	92				
		LSD (0.05)	489.390	1283.239										
		C.V.	7.79%	19.95%										
		Prob (0.05)	0.0000	0.0000										

\*Straw Yield adjusted to 15% moisture

	Grain	Straw
SE	347.2975	910.9485
SD	430.1442	851.9922
H	0.84	0.71

Verner OCCO Oat Performance 2013  
 New Liskeard Agricultural Research Station  
 ( VOPT13 )

Seeded:14-May-13  
 Fertilization:55 N kg/ha  
 Herbicide:1.25 L/ha Logic M

Entry	Code	Variety	Grain kg/ha	Straw kg/ha	1000 Seed weight (g)	Test Wt. kg/hl	Lodging (0-9)	BYDV (0-9)	Height (cm)	Days to Head	Days to Mature	Index		Harv Adjusted	
												Grain	Straw	Grain	Straw
1	3005	OAC Markdale	3426.9	6666.7	33.9	42.4	5.3	2.8	89	58	107	111	120	107	118
2	3006	Alcyon	2960.3	5320.5	30.6	39.9	6.0	2.8	86	57	107	96	96	97	96
3	3008	Prescott	3160.7	3525.7	32.0	42.9	5.3	4.0	81	51	107	102	64	101	68
4	3015	Robust	3415.7	3333.4	32.4	47.4	4.8	1.5	88	56	107	110	60	107	65
5	3019	Canmore	2361.9	5128.2	36.2	44.6	3.3	4.5	93	59	107	76	92	85	93
6	3025	RC Amaze	4094.5	2948.7	32.6	43.6	6.5	0.5	83	51	107	132	53	120	59
7	3026	Synextra	2351.3	7307.7	34.3	45.8	3.0	6.0	96	58	107	76	132	85	128
8	3028	Navaro	2605.5	5577.0	29.3	55.9	0.3	3.0	83	62	107	84	100	90	100
9	3031	Dieter	3413.2	7179.5	38.1	44.1	4.3	3.0	90	62	107	110	129	106	126
10	3032	Avatar	3544.5	5512.9	32.1	44.8	3.8	2.8	93	58	107	115	99	109	99
11	3033	Oscar	2997.8	3910.3	33.1	42.2	6.0	2.0	80	52	107	97	70	98	74
12	3034	HY 174-OA	3417.1	5128.2	37.4	44.8	4.0	1.3	88	52	107	110	92	107	93
13	3037	Optimum	3745.4	6153.9	29.9	43.8	1.0	1.8	85	62	107	121	111	113	110
14	3038	Hidalgo	3166.7	6153.9	33.9	43.6	1.8	1.0	89	60	107	102	111	101	110
15	3039	Vitality	3840.0	4935.9	41.2	43.6	4.8	1.8	96	58	107	124	89	115	90
16	3043	Bradley	3024.3	5128.2	37.0	42.4	1.8	1.0	84	57	107	98	92	99	93
17	3044	CANTAL	2117.8	5192.3	32.3	44.0	6.8	2.8	93	58	107	68	94	80	94
18	3046	AAC Bullet	3489.2	7435.9	36.2	40.2	2.0	2.8	84	60	107	113	134	108	130
19	3047	IDAHO	2093.5	7820.6	28.8	58.5	2.8	3.5	90	62	107	68	141	80	136
20	3049	AAC Roskens	3424.9	3589.8	31.2	42.4	6.5	2.5	81	59	107	111	65	107	69
21	3051	Nice	4370.7	5705.2	37.4	43.3	5.0	4.0	92	58	107	141	103	126	102
22	3054	Riley	2659.3	4487.2	31.5	41.5	7.5	0.5	85	58	107	86	81	91	83
23	3055	OA1286-1	2576.0	4551.3	33.3	44.5	6.3	1.8	88	60	107	83	82	90	84
24	3056	CFA1317	2425.4	6153.9	30.5	43.2	5.0	0.5	85	58	107	78	111	86	110
25	3058	OA1306-1	2291.7	9038.5	36.7	42.6	4.3	1.8	100	66	107	74	163	84	155
26	3059	OA1285-1	3470.6	6410.3	35.8	43.3	2.0	3.3	86	60	107	112	116	108	114
		Average	3094.0	5549.8	33.8	44.4	4.2	2.4	88	58	107				
		LSD (0.05)	1064.4	1462.1											
		C.V.	24.40%	18.70%											
														Grain	Straw
														SE	754.9455 1037.8191
														SD	616.8584 1486.7650
														H	0.63 0.88

Verner OCCC Spring Wheat Performance 2013  
 New Liskeard Agricultural Research Station  
 ( VSWPT13 )

Seeded:14-May-13  
 Fertilization:70 N kg/ha (34-0-0)  
 Herbicide:1.25 L/ha Logic M

Entry	Code	Variety	Grain kg/ha	Straw kg/ha	1000 Seed weight (g)	Test Wt. kg/hl	Lodging (0-9)	Height (cm)	Days to Head	Days to Mature	Index		Harv Adjusted	
											Grain	Straw	Grain	Straw
8	5030	Furano	6296.4	5000.0	37.7	75.1	0	98	57	107	119	118	114	116
21	5066	CM9004	6042.4	5431.1	33.6	73.9	0	80	57	107	115	128	110	125
6	5025	HY 017-HRS	5929.9	4310.4	33.3	73.5	0	77	55	107	113	102	109	101
5	5024	HY 124-HRS	5860.9	5948.3	40.6	72.4	0	87	54	107	111	140	108	135
7	5028	HY 162-HRF	5814.3	3103.5	38.9	69.2	0	83	51	107	110	73	107	77
1	5009	Norwell	5611.2	4061.2	34.2	73.4	0	92	51	107	106	96	105	96
13	5042	AW625	5486.5	4569.0	35.7	70.0	0	103	54	107	104	108	103	107
3	5014	Orleans	5391.3	3448.3	35.5	72.2	0	99	54	107	102	81	102	84
9	5031	MAJOR	5306.3	5948.3	35.2	74.4	0	104	57	107	101	140	100	135
2	5010	Sable	5283.3	3448.3	33.6	72.6	0	78	51	107	100	81	100	84
24	0	Filler-Wilkin	5251.1	4482.8	35.0	71.4	0	84	52	107	100	106	100	105
12	5041	Wilkin	5247.1	4913.8	32.7	70.1	0	82	54	107	100	116	100	114
19	5063	BA83-EC-8	5240.1	5086.2	35.7	71.7	0	100	54	107	99	120	100	118
15	5053	Carberry	5238.5	4569.0	34.2	72.2	0	83	51	107	99	108	100	107
22	5067	AW725	5077.6	4051.7	33.1	71.9	0	96	55	107	96	96	97	96
16	5054	MAGOG	5056.3	3275.9	35.3	71.9	0	97	54	107	96	77	97	80
4	5019	Megantic	5034.8	3793.1	37.1	73.3	0	104	51	107	96	89	97	91
14	5043	KINGSEY	4954.8	4396.6	37.7	73.9	0	102	56	107	94	104	96	103
17	5055	TOPAZE	4896.4	3793.1	31.7	72.0	0	97	59	107	93	89	95	91
18	5062	AW687	4894.1	3620.7	32.2	70.2	0	93	55	107	93	85	95	87
23	5060	Kleos	4796.0	3362.1	37.6	70.8	0	100	51	107	91	79	94	82
10	5032	RICHELIEU	4766.4	4051.7	32.4	70.3	0	102	54	107	90	96	93	96
11	5037	Fuzion	4560.1	3879.3	32.9	71.5	0	103	56	107	87	92	90	93
20	5065	BW932	4446.4	3189.7	37.5	74.2	0	76	56	107	84	75	89	78
		Average	5270.1	4238.9	35.1	72.2	0.0	92	54	107				
		LSD (0.05)	708.1	816.8										
		C.V.	9.52%	13.66%										

	Grain	Straw
SE	501.7123	579.0372
SD	470.5317	825.4776
H	0.72	0.88

Verner OOPSCC (SCCT) Canola Performance 2013  
 New Liskeard Agricultural Research Station  
 (VSCCT13)

Seeded:14-May-13  
 Fertilization:100 N kg/ha (34-0-0) + 52 P kg/ha (8-32-16)  
 Herbicide:0.5 L/ha Poast Ultra M + 1 L/ha Merge

Entry	Code	Variety	Grain kg/ha	1000 Seed weight (g)	Test Wt. kg/hl	Lodging (0-9)	Height (cm)	Days to Head	Days to Mature	Index		Harv Adjusted Grain
										Grain	Straw	
12		1CN0181	592.7	2.7	65.1	0	94			136		131
8		45H31	563.2	3.3	64.8	0	95			129		125
3		5440	541.6	3.0	65.0	0	96			124		121
5	*	73-75RR	517.7	3.0	63.1	0	93			119		116
4		45H29	504.3	3.2	64.4	0	95			116		114
6		Canterra 1990	462.1	3.1	63.6	0	100			106		105
10		45S54	455.9	3.2	65.3	0	91			104		104
2		L150	401.0	2.5	62.6	0	93			92		93
1		45H28	400.5	2.6	65.5	0	98			92		93
7		L130	391.2	2.9	64.4	0	96			90		91
11		74-44BL	384.2	2.8	65.0	0	84			88		90
13		1CN0053	241.0	2.7	63.3	0	90			55		61
9		46H75	217.5	2.8	62.4	0	85			50		56
		Average	436.4	2.9	64.2	0.0	93					
		LSD (0.05)	116.960									
		C.V.	18.67%									

\* plot with one estimated value

	Grain
SE	81.4713
SD	114.4539
H	0.87

Verner Soybean Performance 2013  
 New Liskeard Agricultural Research Station  
 ( VSP13 )

Seeded:14-May-13  
 Fertilization:200 kg/ha (8-32-16) with seed  
 Herbicide:2 L/ha Roundup

Entry	Code	Variety	Grain Yield		100 Seed weight (g)	Test Wt. kg/hl	Lodging (0-9)	Height (cm)	Index Grain	Harv Adjusted Grain
			kg/ha	bu/ac						
3	25-10		3231.4	48.0	14.5	72.2	0	76	116	115
4	26-10		3026.7	45.0	11.5	71.7	0	68	109	108
2	24-61		2850.0	42.4	15.8	72.1	0	67	102	102
1	23-10		2478.8	36.9	15.7	71.3	0	60	89	90
5	26-12		2321.7	34.5	11.7	72.6	0	67	83	84
	Average		2781.7	41.4	13.8	72.0	0.0	68		
	LSD (0.05)		238.465							
	C.V.		5.56%							
										Grain
								SE		154.6632
								SD		377.5701
								Harv		0.96

Grain dried to < 10% moisture before yield measurement