

**2007 Winter Wheat Variety Trial - Continuously Cropped - No-till Mandan**

Cooperator: USDA-ARS, Northern Great Plains Research Lab., Mandan

This Trial was funded by Ducks Unlimited, Bismarck

Variety	Winter	Plant	Test	Grain	---- Grain Yield ----			Average Yield	
	Surv.	Height	Weight	Protein	2005	2006	2007	2 yr	3 yr
	%	inches	Lbs/bu	%	----- Bushels per acre -----				
Millennium	97	35	63.6	10.5	40.0	36.9	84.2	60.6	53.7
Harding	96	36	62.6	10.9	52.8	36.5	69.1	52.8	52.8
Jerry	97	38	58.7	11.4	46.1	39.1	60.5	49.8	48.6
CDC Buteo	96	33	62.8	10.5	32.8	38.3	70.7	54.5	47.3
Roughrider	98	40	61.4	11.4	36.1	37.2	66.0	51.6	46.4
Wesley	97	29	58.6	10.9	12.8	41.1	73.1	57.1	42.3
Ransom	97	38	59.7	10.5	32.2	30.9	63.6	47.2	42.2
Wendy**	98	29	59.1	11.2	17.8	39.5	66.8	53.2	41.4
Expedition	94	31	59.6	10.6	27.4	36.9	55.7	46.3	40.0
McClintock	95	40	61.5	10.7	21.7	35.7	54.1	44.9	37.2
CDC Falcon	97	30	55.6	12.0	16.9	37.4	54.1	45.8	36.1
Yellowstone	98	33	55.4	11.7	12.5	34.5	50.6	42.6	32.5
Alice**	98	29	59.1	10.5		43.5	61.6	52.6	
Jagalene	97	32	57.1	10.7		42.0	60.1	51.0	
Paul	97	34	55.7	11.1		41.5	59.3	50.4	
Goodstreak	95	33	55.3	9.8		34.5	65.2	49.8	
Radiant	97	35	59.1	11.0		36.5	55.7	56.1	
Hawken	98	30	61.5	10.8			74.3		
Darrell**	97	35	60.2	9.9			73.5		
NuDakota	97	30	57.8	9.6			67.2		
Willow Creek <sup>#</sup>	98	50	--	14.2			24.9		
Trial Mean	96	34	59.1	10.9	27.4	37.5	62.7	--	--
C.V. %	3.5	4.1	2.1	5.9	20.7	16.5	14.3	--	--
LSD .05	6	2	2.0	1.1	9.5	NS	14.7	--	--
LSD .01	NS	3	2.7	1.4	12.9	NS	19.6	--	--

\*\* Hard white winter wheat.

<sup>#</sup> Forage winter wheat.

NS = No Statistical difference between varieties.

Planting Date: September 30, 2006      Harvest Date: August 3, 2007

Seeding Rate: 1 million live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2004 = lentil, 2005 & 2006 = HRWW.

**2007 Winter Wheat Variety Trial - Continuously Cropped - No-till**

**Hettinger**

Variety	Winter Surv.	Heading Date	Plant Height	Lodg	Test Weight	Grain Protein	---- Grain Yield ----			Average Yield		
	%	June	inches	0-9*	Lbs/bu	%	2005	2006	2007	2 yr	3 yr	
							----- Bushels per acre -----					
CDC Buteo	99	10	39	0.8	64.2	13.4	65.8	36.9	60.1	48.5	54.3	
Harding	99	9	38	0.8	61.2	13.6	71.1	27.0	59.5	43.2	52.5	
Jerry	99	9	41	0.5	61.4	14.5	70.8	24.8	59.3	42.0	51.6	
Ransom	98	10	40	1.8	58.6	14.0	64.5	30.4	56.4	43.4	50.4	
Yellowstone	98	11	35	0.0	60.4	13.2	68.2	20.4	59.3	39.8	49.3	
Wesley	98	7	28	0.0	59.6	14.4	68.7	19.1	57.8	38.4	48.5	
Wendy**	99	4	30	0.0	62.6	13.8	61.7	18.9	62.8	40.8	47.8	
Jagalene	98	8	31	0.0	63.7	13.0	61.3	20.9	60.5	40.7	47.6	
CDC Falcon	98	8	33	0.0	61.2	12.8	66.7	8.7	65.9	37.3	47.1	
Millennium	98	8	37	0.8	62.6	13.8	66.9	8.7	63.0	35.8	46.2	
Roughrider	99	11	44	1.8	61.8	14.9	60.8	28.3	49.5	38.9	46.2	
Expedition	98	4	34	1.5	61.9	13.5	55.7	19.4	60.5	40.0	45.2	
McClintock	96	11	40	0.2	62.2	13.6	63.3	8.9	50.8	29.8	41.0	
Radiant	99	11	38	0.0	59.9	12.2		41.7	59.5	50.6		
Paul	98	11	34	0.2	58.8	13.4		22.4	57.6	40.0		
Goodstreak	95	11	35	0.2	60.3	12.0		17.8	55.8	36.8		
Alice**	97	6	29	0.2	60.3	13.4		14.7	54.3	34.5		
Willow Creek#	99	19	50	1.2	59.4	14.6		21.4	32.3	26.8		
Hawken	98	5	30	0.0	62.5	13.2			63.0			
Darrell*	98	9	35	0.8	62.3	13.6			57.0			
NuDakota	95	8	27	0.0	62.8	12.4			55.5			
Trial Mean	98	9	35	0.6	61.4	13.4	64.0	22.1	58.1	--	--	
C.V. %	1.4	0.7	4.5	73	2.6	6.9	4.5	46.1	6.7	--	--	
LSD .05	2	1	2	0.7	2.2	1.3	4.7	17.0	5.5	--	--	
LSD .01	2	2	3	0.9	2.9	1.7	6.3	NS	7.2	--	--	

\* Lodging: 0 = none, 9 = lying flat on ground.

\*\* Hard white winter wheat.

# Forage winter wheat.

NS = No Statistical difference between varieties.

Planting Date: September 11, 2006

Harvest Date: July 25, 2007

Seeding Rate: 1 million live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2004 = barley, 2005 = soybean, 2006 = field pea.

Notes: The 2006 trial sustained severe late season heat and moisture stress.

**2007 WestBred Winter Wheat Variety Trial at Hettinger, ND**  
**Continuously Cropped, No-till**

Variety	Winter Surv.	Heading Date	Plant Height	Test Weight	Grain Protein	Grain Yield
	%	June	inches	Lbs/bu	%	Bu/Ac
Hyalite	98	6	33	64.3	12.8	60.5
CDC Buteo	99	8	36	65.2	12.0	57.2
Norris	99	4	34	62.4	12.6	56.4
Harvard	98	11	31	62.1	12.8	47.0
Trial Mean	99	7	33	63.5	12.6	55.3
C.V. %	0.6	0.5	4.3	1.9	8.2	9.8
LSD .05	NS	1	2	2.0	NS	8.7
LSD .01	NS	2	3	2.8	NS	12.5

Planting Date: September 19, 2006

Harvest Date: July 25, 2007

Seeding Rate: 1 million live seeds / acre.

Previous Crop: field pea

NS = No Statistical difference between varieties.

**2007 Winter Wheat Variety Tolerance to Foliar Diseases at Hettinger**

Nathan Bird, IPM Crops Scout, Dickinson Res. Ext. Center

Variety	----- Leaf Rust -----		---- TS/Septoria* ----	
	Incidence	Severity	Incidence	Severity
	%	%	%	%
Wesley	10	2	100	2
Jerry	10	2	100	5
Wendy	90	2	100	2
Millennium	30	2	100	3
Roughrider	80	6	100	3
CDC Falcon	80	4	100	3
Jagalene	100	8	100	1
Yellowstone	60	4	100	3
Expedition	80	8	100	2
CDC Buteo	100	6	100	2
Paul	100	10	100	2
Harding	20	2	100	2
McClintock	100	6	100	2
Alice	100	6	100	2
Ransom	30	4	100	3
Darrel	100	6	100	2
Radiant	100	4	100	4
Goodstreak	100	10	100	4
NuDakota	50	2	100	3
Hawken	0	0	100	3
Willow Creek	80	8	100	2

\*TS/Septoria = tan spot and septoria complex.

Disease Incidence = percent of plants infected with disease.

Disease Severity = percent of flag leaf area infected by disease.

Date of observations: June 21 – milk stage

Planting Date: September 11, 2006

Previous Crop: Field pea