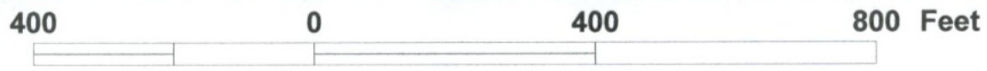


Ted Grembowicz
Creek Rd
North Clarendon, VT 05759
Field on School House Rd



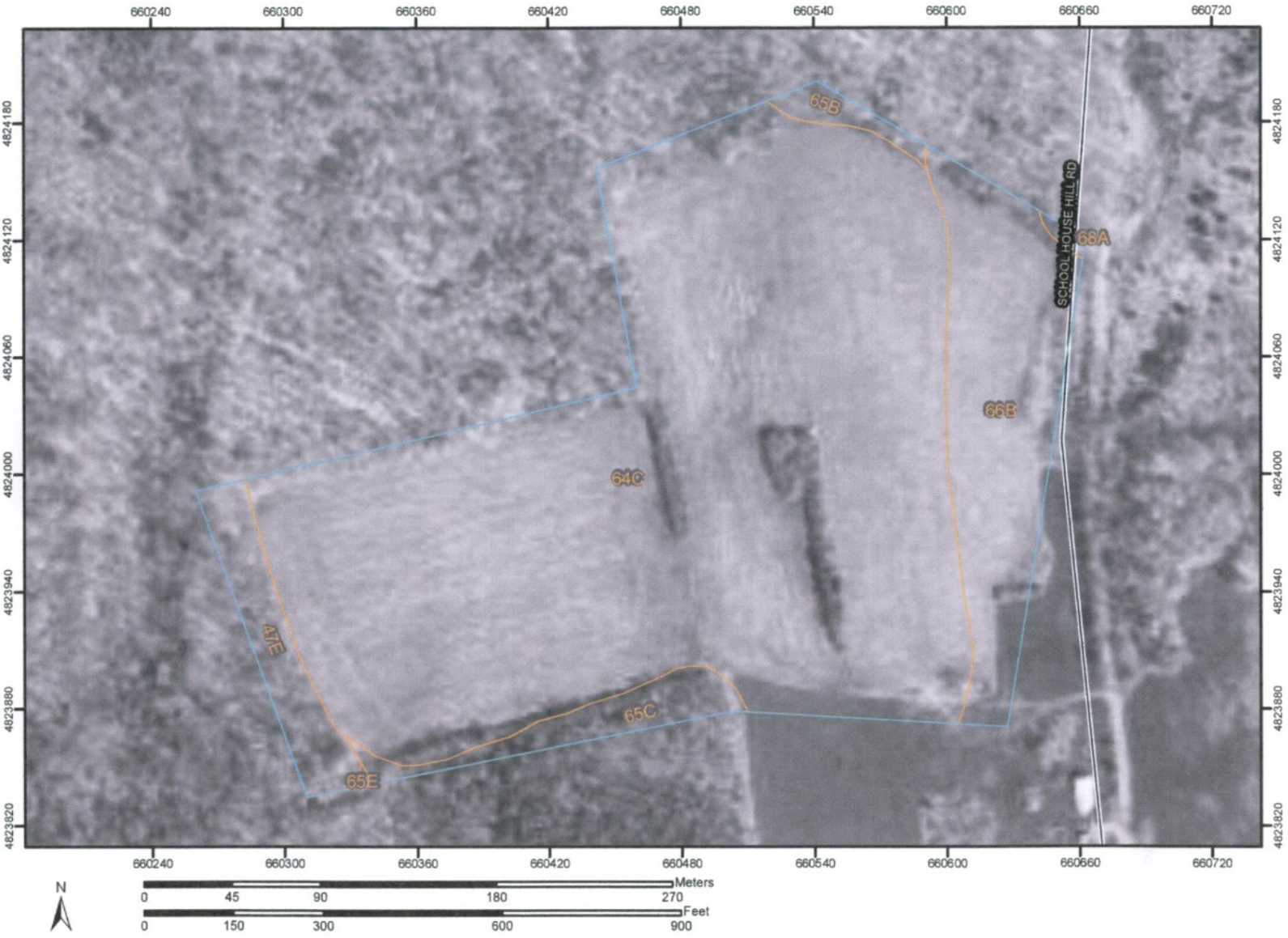
SARE Test Plots



-  Side Hill wheat ~ 4 acres
-  Lower Field Wheat ~4.7Acres

Jennifer Durham
SVNMP
802-287-2250
September 2007

Soil Map—Rutland County, Vermont
(Grembowicz Wheat Fields)




Map Unit Legend

Rutland County, Vermont (VT021)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
47E	Dutchess silt loam, 25 to 60 percent slopes, very stony	1.0	4.1%
64C	Stockbridge gravelly silt loam, 8 to 15 percent slopes	18.9	78.1%
65B	Stockbridge gravelly silt loam, 3 to 8 percent slopes, very stony	0.3	1.0%
65C	Stockbridge gravelly silt loam, 8 to 15 percent slopes, very stony	0.7	3.0%
65E	Stockbridge gravelly silt loam, 25 to 45 percent slopes, very stony	0.0	0.1%
66B	Georgia and Amenia soils, 3 to 8 percent slopes	3.3	13.5%
68A	Massena silt loam, 0 to 8 percent slopes, very stony	0.1	0.2%
Totals for Area of Interest (AOI)		24.2	100.0%

Soil Map—Rutland County, Vermont
(Grembowicz Wheat Fields)

MAP LEGEND






















Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot



 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

Municipalities

-  Cities
-  Urban Areas

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails

Roads

-  Interstate Highways
-  US Routes
-  State Highways
-  Local Roads
-  Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 18N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rutland County, Vermont
Survey Area Data: Version 9, Jun 19, 2007

Date(s) aerial images were photographed: 5/9/1994

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

SAMPLE DESCRIPTION

SOIL TEST REPORT

AGRICULTURAL & ENVIRONMENTAL TESTING LABORATORY
AND UVM EXTENSION
UNIVERSITY OF VERMONT

REPORT FOR:

Jennifer Durham
SoVt NMP 37 Pluss Ln
E. Clarendon VT 05759

LAB NUMBER DATE
B 70963 *received 04/25/2007*
COUNTY *complete 05/18/2007*
RUTLAND *Received 5/23/07*
FIELD NAME

Grembowicz Side Hill Wheat **4**

SOIL TEST RESULTS

	LOW	MEDIUM	OPTIMUM	HIGH
pH				
Avail. Phosphorus (ppm P)	1.2			
Potassium (ppm K)	35			
Magnesium (ppm Mg)	69			
Aluminum (ppm Al)	59			
Calcium (ppm Ca)	705			
Zinc (high) (ppm Zn)	1.9			
Effective CEC (meq/100g)	4.2			
%Ca	84.1			
%K	2.1			
%Mg	13.7			
% Organic Matter	2.7%			

LIME AND FERTILIZER RECOMMENDATIONS

(3) Oats, barley, rye, wheat, triticale, millet

	LIME	NITROGEN (N)	PHOSPHATE (P ₂ O ₅)	POTASH (K ₂ O)	MAGNESIUM (MG)
LIME & NUTRIENTS NEEDED:	0.0	50	70	100	0
CONTRIBUTION FROM MANURE:		0	0	0	0
BALANCE NEEDED FROM FERTILIZER:	0.0	50	70	100	0

No lime is needed for this crop's optimum pH 6.2

FOR ADDITIONAL INFORMATION ABOUT THIS TEST, CONTACT YOUR UVM EXTENSION AGENT →

Jeff Carter 802-388-4969
Heather Darby 800-639-2130

FIELD INFORMATION FROM QUESTIONNAIRE

- 1. Well-drained [2]
- 2. Not tilled [3]
- NO MANURE INFORMATION FOR THIS CROP
- 10. Crop to be used for grain [2]
- 11. (Yield information is not used in this case)
- 12. Sod not plowed down within the last year [1]
- 13. (Previous crop info is not used in this case)
- 14. (Legume information is not used in this case)
- 15. Will not be seeding alfalfa within 2 years [2]

UVM AGRICULTURAL TESTING LAB ANALYSIS RESULTS

B 70963 05/18/2007
LAB # Date Completed

PACKAGE 1 MICRONUTRIENTS * (ppm in soil)

		Your results	Avg. levels in Vermont soils
Sodium	(Na)	11.0	20.0
Iron	(Fe)	5.9	7.0
Boron	(B)	0.4	0.3
Manganese	(Mn)	12.7	14.0
Copper	(Cu)	0.3	0.4
Zinc	(Zn)	1.9	1.0
Sulfur	(S)	16.6	

* Micronutrients are not usually deficient in Vermont soils. The average levels are provided for comparison only and are not necessarily optimum levels for plant growth. Additions of micronutrient fertilizers should be done with caution because of the narrow range between deficiency and toxicity. Organic residues such as manure, are usually good sources of micronutrients.

% Organic Matter 2.7

UVM AGRICULTURAL TESTING LAB ANALYSIS RESULTS

W 72219

10/05/2007

lab #

date completed

REPORT FOR

Sidehill Broadcast

Heather Darby

Rutland, VT

pH (water) 6.1 (salt) 5.5

Available Phosphorus	(ppm P)	2.4
Potassium	(ppm K)	68
Magnesium	(ppm Mg)	95
Aluminum	(ppm Al)	37
Calcium	(ppm Ca)	767
Zinc	(ppm Zn)	0.6
Effective CEC	(meq/100g)	4.8
%Ca	%K	%Mg
74.0	3.4	15.3

Lime requirement for water pH 6.2: 1.0 Tons per acre
for water pH 6.8: 2.0 Tons per acre

PACKAGE 1 MICRONUTRIENTS * (ppm in soil)

	Your results	Avg. levels in Vermont soils
Sodium (Na)	8.0	20.0
Iron (Fe)	4.4	7.0
Boron (B)	0.3	0.3
Manganese (Mn)	7.3	14.0
Copper (Cu)	<.2	0.4
Zinc (Zn)	0.6	1.0
Sulfur (S)	18.1	

% Organic Matter 3.4

% Nitrogen 0.195

UVM AGRICULTURAL TESTING LAB ANALYSIS RESULTS

W 72221

10/05/2007

lab #

date completed

REPORT FOR

Sidehill In furrow

Heather Darby

Rutland, VT

pH (water) 6.1 (salt) 5.5

Available Phosphorus (ppm P)	3.1
Potassium (ppm K)	62
Magnesium (ppm Mg)	96
Aluminum (ppm Al)	39
Calcium (ppm Ca)	765
Zinc (ppm Zn)	0.6
Effective CEC (meq/100g)	4.8
%Ca	73.4
%K	3.1
%Mg	15.4

Lime requirement for water pH 6.2: 1.0 Tons per acre
for water pH 6.8: 2.0 Tons per acre

PACKAGE 1 MICRONUTRIENTS * (ppm in soil)

	Your results	Avg. levels in Vermont soils
Sodium (Na)	9.0	20.0
Iron (Fe)	3.7	7.0
Boron (B)	0.3	0.3
Manganese (Mn)	6.5	14.0
Copper (Cu)	<.2	0.4
Zinc (Zn)	0.6	1.0
Sulfur (S)	17.1	

% Organic Matter 3.4

% Nitrogen 0.213

SAMPLE DESCRIPTION

SOIL TEST REPORT
 AGRICULTURAL & ENVIRONMENTAL TESTING LABORATORY
 AND UVM EXTENSION
UNIVERSITY OF VERMONT

LAB NUMBER

DATE

B 70964

received 04/25/2007

COUNTY

complete 05/18/2007

RUTLAND

FIELD NAME

Grembowicz Lowerfield Wheat

REPORT FOR:

Jennifer Durham
 SoVt NMP 37 Pluss Ln
 E. Clarendon VT 05759

SOIL TEST RESULTS

	LOW	MEDIUM	OPTIMUM	HIGH
pH				6.0
Avail. Phosphorus (ppm P)				1.0
Potassium (ppm K)				38
Magnesium (ppm Mg)				50
Aluminum (ppm Al)				53
Calcium (ppm Ca)				841
Zinc (high) (ppm Zn)				1.8
Effective CEC (meq/100g)				4.7
%Ca				74.4
%K				1.7
%Mg				7.4
% Organic Matter				3.0%

LIME AND FERTILIZER RECOMMENDATIONS

(3) Oats, barley, rye, wheat, triticale, millet

	LIME	NITROGEN (N)	PHOSPHATE (P ₂ O ₅)	POTASH (K ₂ O)	MAGNESIUM (MG)
LIME & NUTRIENTS NEEDED:	1.5	50	70	100	0
CONTRIBUTION FROM MANURE:		0	0	0	0
BALANCE NEEDED FROM FERTILIZER:	1.5	50	70	100	0

Rate of lime recommended is to raise soil pH to 6.2
 Broadcast lime before or during seedbed preparation and harrow in.

FOR ADDITIONAL INFORMATION ABOUT THIS TEST, CONTACT YOUR UVM EXTENSION AGENT →

Jeff Carter 802-388-4969
 Heather Darby 800-639-2130

FIELD INFORMATION FROM QUESTIONNAIRE

1. Well-drained [2]

2. Not tilled [3]

NO MANURE INFORMATION FOR THIS CROP

10. Crop to be used for grain [2]
 12. Sod not plowed down within the last year [1]
 (Legume information is not used in this case)

11. (Yield information is not used in this case)
 13. (Previous crop info is not used in this case)
 15. Will not be seeding alfalfa within 2 years [2]

UVM AGRICULTURAL TESTING LAB ANALYSIS RESULTS

B 70964 05/18/2007
LAB # Date Completed

PACKAGE 1 MICRONUTRIENTS * (ppm in soil)

		Your results	Avg. levels in Vermont soils
Sodium	(Na)	11.0	20.0
Iron	(Fe)	5.0	7.0
Boron	(B)	0.3	0.3
Manganese	(Mn)	25.2	14.0
Copper	(Cu)	0.3	0.4
Zinc	(Zn)	1.8	1.0
Sulfur	(S)	27.7	

* Micronutrients are not usually deficient in Vermont soils. The average levels are provided for comparison only and are not necessarily optimum levels for plant growth. Additions of micronutrient fertilizers should be done with caution because of the narrow range between deficiency and toxicity. Organic residues such as manure, are usually good sources of micronutrients.

% Organic Matter 3.0

UVM AGRICULTURAL TESTING LAB ANALYSIS RESULTS

W 72222

10/05/2007

lab #

date completed

REPORT FOR

Lower Field in Furrow

Heather Darby

Rutland, VT

pH (water) 6.4 (salt) 5.8

Available Phosphorus	(ppm P)	2.4
Potassium	(ppm K)	46
Magnesium	(ppm Mg)	125
Aluminum	(ppm Al)	15
Calcium	(ppm Ca)	1388
Zinc	(ppm Zn)	0.4
Effective CEC	(meq/100g)	8.1
%Ca	%K	%Mg
85.7	1.5	12.9

Lime requirement for water pH 6.2: 0.0 Tons per acre
for water pH 6.8: 1.0 Tons per acre

PACKAGE 1 MICRONUTRIENTS * (ppm in soil)

		Your results	Avg. levels in Vermont soils
Sodium	(Na)	10.0	20.0
Iron	(Fe)	1.0	7.0
Boron	(B)	0.5	0.3
Manganese	(Mn)	7.8	14.0
Copper	(Cu)	<.2	0.4
Zinc	(Zn)	<.5	1.0
Sulfur	(S)	24.6	

% Organic Matter 3.8

% Nitrogen 0.245

UVM AGRICULTURAL TESTING LAB ANALYSIS RESULTS

W 72220 10/05/2007
lab # date completed

REPORT FOR

Lower Field Broadcast

Heather Darby

Rutland, VT

pH (water) 6.1 (salt) 5.5

Available Phosphorus	(ppm P)	2.5
Potassium	(ppm K)	51
Magnesium	(ppm Mg)	76
Aluminum	(ppm Al)	30
Calcium	(ppm Ca)	1176
Zinc	(ppm Zn)	0.7
Effective CEC	(meq/100g)	6.6
%Ca	%K	%Mg
85.6	1.9	9.2

Lime requirement for water pH 6.2: 1.0 Tons per acre
for water pH 6.8: 2.0 Tons per acre

PACKAGE 1 MICRONUTRIENTS * (ppm in soil)

	Your results	Avg. levels in Vermont soils
Sodium (Na)	9.0	20.0
Iron (Fe)	2.4	7.0
Boron (B)	0.4	0.3
Manganese (Mn)	11.4	14.0
Copper (Cu)	0.2	0.4
Zinc (Zn)	0.7	1.0
Sulfur (S)	22.0	

% Organic Matter 3.3

% Nitrogen 0.2224