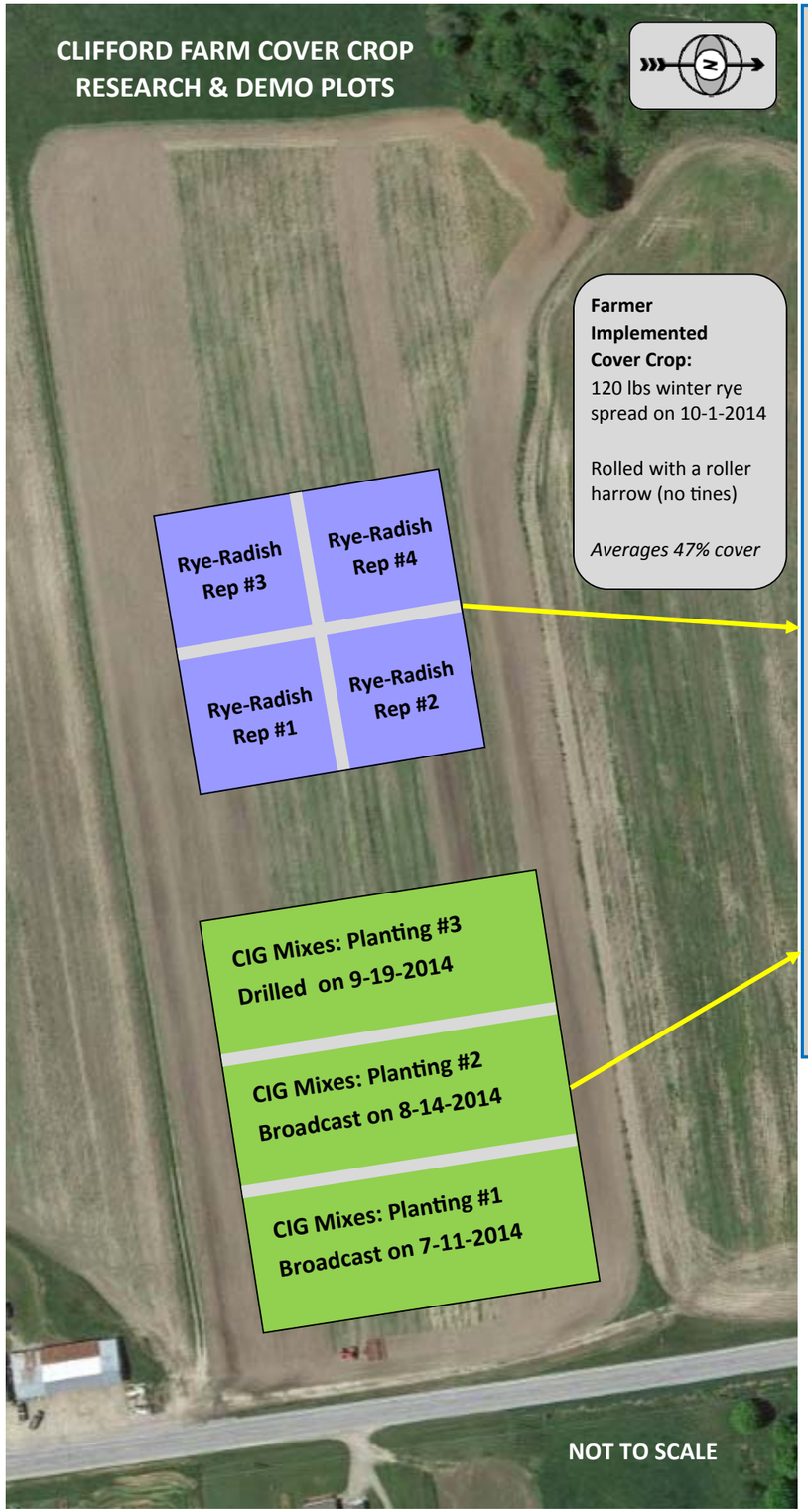

Site Statistics:

Location: Starksboro, VT
Soil Type: Canandaigua silt loam (up to 35% clay)
Corn Planted: May 25, 2014
Corn Maturity: 87 RM (Wolf River 2387L)
Corn Harvested: September 17th, 2014
Average Yield: 19.5 tons/acre

NIFA-SARE Cover Crop Plots

Planted: *9-19-2014*
Manure Spread: *9-23-2014*
@ 7000 gal./ac. over
East half of all plots

CIG Cover Crop Mixes

Planted:
7-11-2014, 8-14-2014, 9-19-2014
Manure Spread: *9-23-2014*
@ 6000 gal./ac. over
East half of all plots

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COVER CROP FIELD DAY

NOVEMBER 7, 2014 * CLIFFORD FARM * STARKSBORO, VT

CHAMPLAIN VALLEY FARMER COALITION INC.

A special thank you:

Eric & Jane Clifford
Clifford Farm
Starksboro, VT

Stephen Linehan
Custom Spreading, Inc.
Bristol, VT

Edmund Schilliwaski
SeedWay
**Custom seed mixes*

SEEDWAY

Funding for these projects was provided by:

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service
Conservation Innovation Grant

USDA United States Department of Agriculture National Institute of Food and Agriculture
NORTHEAST SARE Sustainable Agriculture Research & Education

Project Summary:

The Clifford Farm is a multi-generational dairy farm located in Starksboro, Vermont. They milk 250 Holstein dairy cows and grow crops on roughly 500 acres. Eric is the President of the Champlain Valley Farmer Coalition and takes leadership roles in several other local organizations

The Cliffords have been utilizing several methods to establish cover crops in their corn fields, using winter cereal rye. The previous two years it was applied with a helicopter aerially into standing corn in early September. This year, the helicopter was unavailable, and Eric and his crew spread around 150 acres of winter cereal rye by broadcasting it on the surface and rolling the field after with a roller harrow. Many of the fields also received a fall application of manure in conjunction with the cover crop. Eric is interested in adopting no-till planting methods, and is also been planting shorter day (relative maturity) corn varieties to open up his window for planting cover crops and his ability to add some new and different cover crop species.

The Clifford Farm hosts two important Extension projects.

- **"Better Cover Crop Mixes in Vermont"** is a NRCS Conservation Innovation Grant demonstrating 10 different cover crop mixtures planted at three different times, broadcast on two dates into standing corn and drilled after harvest. This project was implemented on 5 farms throughout the Champlain Valley.
- **"Evaluating the Use of Forage Radish to Enhance Winter Rye Cover Crop Performance"** is a USDA-NIFA and Northeast SARE Graduate Student research project. It aims to assess whether the addition of forage radish to a winter rye cover crop enhances the fall and spring cover crop performance. This project has an emphasis on utilizing manure in conjunction with cover crops in a corn silage system.

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Champlain Valley Crop, Soil & Pasture Team

Project Leader
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Extension Agronomist

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Kirsten Workman
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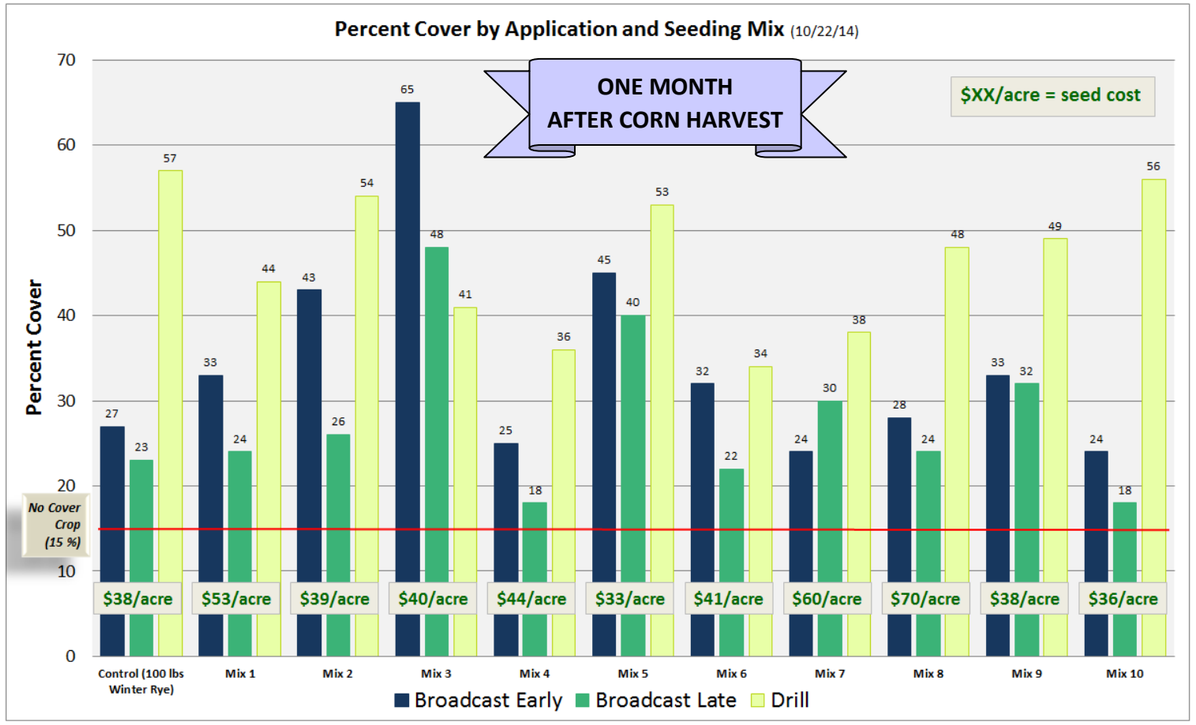
USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

BETTER COVER CROP MIXES FOR VERMONT

An NRCS Conservation Innovation Grant Demonstration Project



11-Jul-14 **Early Broadcast** | 14-Aug-14 **Late Broadcast** | 19-Sep-14 **Drill**

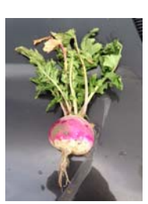
20 feet

	Grass/Grain	Legume	Brassica/ Forbe	Lbs/Acre
Control	Winter Rye 100			100
Mix 1:	Forage Oats 30	Field Pea 25	Tillage Radish 5	60
Mix 2:	Winter Triticale 50	Aust. Winter Pea 25	Rapeseed 5	80
Mix 3:	Ann. Ryegrass 15	Aust. Winter Pea 25	Tillage Radish 5	45
Mix 4:	Winter Wheat 50	Aust.Winter Pea 25	Tillage Radish 5	80
Mix 5:	Ann. Ryegrass 15	Clover - Berseem 5	Tillage Radish 5	25
Mix 6:	Winter Triticale 50	Clover - Crimson 5	Tillage Radish 5	60
Mix 7:	Forage Oats 30	Hairy Vetch 10	Mustard 5	45
Mix 8	Winter Triticale 50	Hairy Vetch 10	Mustard 5	65
Mix 9:	Winter Rye 50	Aust. Winter Pea 25	Forage Turnip 5	80
Mix 10:	Winter Rye 50	Clover-Crimson 5	Rapeseed 5	60

20 feet | 20 feet

100 feet | 100 feet | 100 feet



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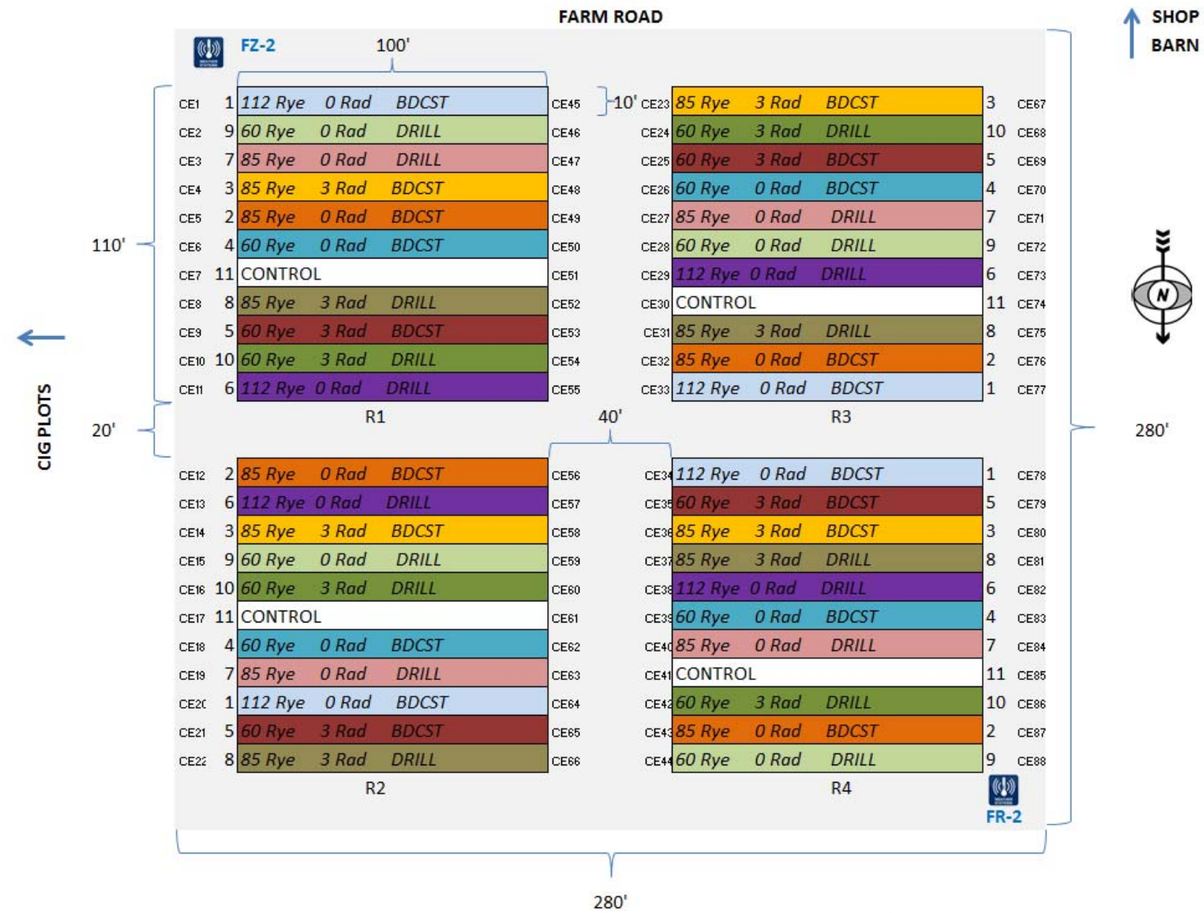
EVALUATING THE USE OF FORAGE RADISH TO ENHANCE WINTER RYE COVER CROP PERFORMANCE

A USDA-NIFA and Northeast SARE Graduate Research Project

NORTHEAST SARE Sustainable Agriculture Research & Education
USDA United States Department of Agriculture
National Institute of Food and Agriculture

RYRA TREATMENTS

	lbs./ac. Rye	lbs./ac. Radish	Planting Method	Legend
T1	112	0	BDCST	
T2	85	0	BDCST	
T3	85	3	BDCST	
T4	60	0	BDCST	
T5	60	3	BDCST	
T6	112	0	DRILL	
T7	85	0	DRILL	
T8	85	3	DRILL	
T9	60	0	DRILL	
T10	60	3	DRILL	
T11	0	0	CNTRL	



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