

# A Progressive Perspective:

A farmer panel discussion with Mark  
Anderson and George Foster

Feb. 26, 2020



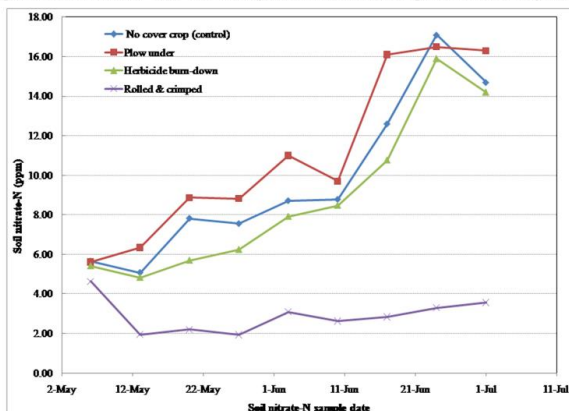
Jeff Sanders\* & Heather Darby†

University of Vermont Extension  
\*Jeffrey.sanders@uvm.edu †hedarby@uvm.edu

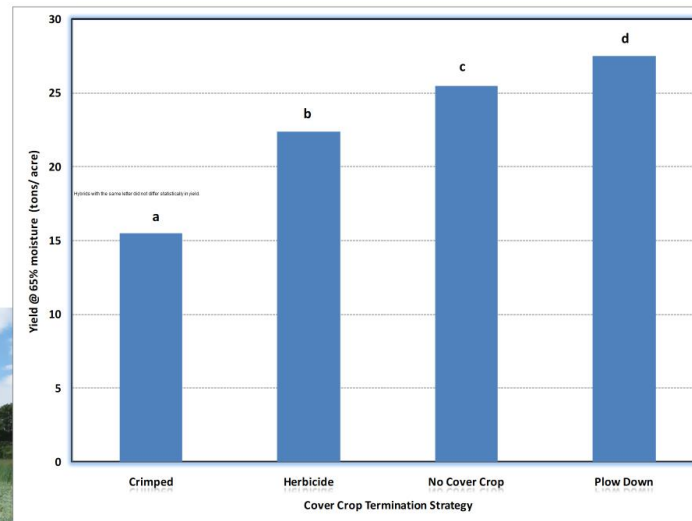
## Roller crimping sequesters nitrogen

Cover crop	Cover crop	Tillage	Corn	N	Corn
termination method	termination date	type	planting Date	topdress* lbs/acre	harvest date
No cover crop (control)		Plow & disk	13-May	70	6-Oct
Plow under	6-May	Plow & disk	13-May	66	6-Oct
Herbicide burn-down	6-May	No-till	13-May	70	6-Oct
Rolled & Crimped	1-Jun	No-till	1-Jun	140	21-Oct

Figure 2. Soil nitrate-N of cover crop termination strategies from late April to mid-July.



## Roller crimping can impact yields



## Roller crimping results in increased biomass

Cover crop termination method	Cover crop dry matter tons/acre	Cover crop tissue nitrogen %	Cover crop tissue nitrogen lbs/acre
No cover crop (Control)	0	0	0
Rolled & crimped	3.10*	1.57	97
Herbicide burn-down	1.84	2.93*	107*
Plow under	1.73	3.02*	104*
LSD (0.10)**	0.26	0.242	3.21

## Roller crimping armors the soil



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**MARK'S FARM**

**LANDVIEW FARM LLC**

**PARTNERSHIP BETWEEN THE WALKER FAMILY AND MARK ANDERSON**

**LOCATED NEAR BENNINGTON VT, IN WHITE CREEK NY**

**MILK 1400 COWS, 1120 HEIFERS**

**CROPPING OPERATIONS ON 2400 ACRES**

**1300 ACRES CORN (90+<sup>0</sup>% COVER CROPPED)**

**1100 ACRES HAY CROP**

**650 ACRES GRASS**

**300 ACRES ALFALFA**

**150 ACRES SUDANGRASS FOR HEIFERS**



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## **BEGAN ROLLING/PLANTING IN SPRING 2015**

**ROLLING/PLANTING ARE TWO SEPARATE OPERATIONS  
30' LAND ROLLER WITH 42" DRUMS, FOLLOWED BY A  
12 ROW PLANTER GOING THE SAME DIRECTION**

**2019 TRIED TERMINATING RYE AT PLANTING, ROLLING AFTER CORN EMERGED**





# THE FARMSTEAD (MARK)



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# ROLL PLANT



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# PLANT 1<sup>ST</sup>, SPRAY, ROLL AFTER EMERGENCE



# PLANT, SPRAY, ROLL AT V-2



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# PLANT 1<sup>ST</sup>, ROLL AFTER, SAME DAY



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## GEORGE'S FARM

GEORGE AND HIS SON JEREMY RUN THE CROPPING SIDE OF FOSTER BROS. FARM IN MIDDLEBURY, VT

MILK 480 COWS, 350 HEIFERS

CROPPING OPERATIONS ON 1650 ACRES

550 ACRES CORN (100% COVER CROPPED)

250 SOY BEANS

80 ACRES SMALL GRAINS (RYE)

770 HAY GROUND

BEGAN NO-TILLING 2012

BUILT ROLLER CRIMPER IN 2017





# THE FARMSTEAD FOSTER BROS.





# ALWAYS LEARNING

George Foster,  
*Foster Brothers Farm Inc.*



Foster Bros. Farm, Middlebury



# THE ROLLER CRIMPER



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# PLANTING GREEN



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# KINZE PLANTER NO-TILL SETUP



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# KINZE PLANTER NO-TILL SETUP



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# ROLLER CRIMPING PLANTING ONE PASS





# SYSTEM WORKS FOR BEANS



# PROGRESSIVE TIPS TO PROMOTE PROFITS

## Roller Crimp Strategies

### Tip #1

Lay it Flat

“Roll rye at pollination so it stays flat, vegetative rye will stand back up.”

“Thicker stands of rye will stay flat better than thinner ones.”

“Get tall covers flat on the ground, so corn is not shaded” Mark Anderson

### Tip #2

Plan extra time for planting, “The roller crimper slowed up corn planting a little due to its limitations to highway travel.” George Foster



# PROGRESSIVE TIPS TO PROMOTE PROFITS

## Fertility, Planting, and Termination in a Roll/Crimp System

### Tip #3

“Add 60+ lbs. of nitrogen at planting” Mark Anderson

“Add additional liquid N at planting time” George Foster

### Tip #4

“Planting green helps reduce sidewall compaction when planting corn into wetter soils.” George Foster

### Tip #5

“Minimum 2 inch planting depth, allow for thickness of the rolled rye” Mark Anderson

### Tip #6

“Plan on using herbicide to terminate rye.” Mark Anderson





# PROGRESSIVE TIPS TO PROMOTE PROFITS

## Equipment Strategies

### Tip #7

“Properly designed and adjusted row cleaners, get the rye out of the row , soil will warm faster.”  
Mark Anderson

### Tip #8

“Heavy Covers necessitated the need to fabricate a 30’ roller crimper...” George Foster

### Tip #9

“Get the furrow closed, watch your closing system” Mark Anderson

### Tip #10

“Planting green, row cleaners, and rolling the cover crop in the same direction help to reduce closing wheel wrapping.” George Foster



# PROGRESSIVE TIPS TO PROMOTE PROFITS

## Other Considerations

### Tip #11

“Planting into Green cover crops, soil is mellow.” Mark Anderson

### Tip #12

“Plant covers early as possible in the fall, for maximum spring growth, Rye matures quickest.” Mark Anderson

### Tip #13

“Rye is the most tolerate to manure applications in fall.” Mark Anderson





# RESULTS MATTER



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# BOTTOM LINE/PROFITABILITY

## **Mark Anderson's Farm**

The use of No-till and planting green in to Cover crops has allowed us to successfully plant AND harvest corn over a wide range of soil conditions. Above ground, cover crops protect our soil from the elements, and helps create a habitat for beneficial insects. Below ground, the living roots maintain an environment that helps sustain the soil biology. As a result, we have seen improvement in the soil tilth and overall health of our soils. This has led to lower input cost, and higher yields. Going forward, we believe healthy soils are the key to profitably growing forages for our herd.

## **George Foster's Farm**

On our less than desirable clay soils we found that cover cropping and no-till planting helps them to be more productive in all weather conditions and our sandy soils hold more moisture during dry spells. Our fall harvest is more efficient and less muddy on our clay soils.

