

CHAMPLAIN VALLEY CROP, SOIL & PASTURE TEAM

FALL 2017

In This Issue

- News & Events, RMA Update, pg 2
- Demonstrating Success: Corn Hybrid Trials, pg 3
- Grazing as a New Management Practice, pps 4-5
- Managing Slugs Begins in the Fall, pg 6
- Helping Farmers Adapt to a Changing Landscape, pg 7



FOCUSING ON AGRICULTURE IN THE CHAMPLAIN VALLEY AND BEYOND

By Jeff Carter, Agronomy Specialist

The rainy weather of spring and summer left farmers planting late, spreading manure late, and now, no surprise, corn silage looks to be maturing late. While the weather here has dried out and our creeks have been drying up, other parts of the U.S. are seeing wildfires and hurricanes.

OVERWHELMED is how I feel these days and I know many farmers are feeling the same way. This is why we offer so many opportunities for farmers to network and learn how to adapt to the ever-changing matrix of farming in Vermont. This summer's weather derailed many farmers' plans for crops and manure management that were so carefully laid out this year, and it has been a test of the new Required Agriculture Practices (RAPs) regulations for that reason. Farmers have always been adept at changing their course of action because the weather never seems "just right" – it is always too wet, too dry, too cold or too hot. With changes both regulatory and weather related, I think the farm community is looking for even more resilience in Vermont agriculture systems in the face of uncertainty. Adapting is how we move forward.

The farmers I know have really done a great job of stepping up and working hard to make Vermont a better place to live. Our Champlain Valley Farmer Coalition (CVFC) and UVM Extension workshops and meetings are alive with discussions on new ag methods and approaches: adopting no-till planting, reducing soil compaction, and keeping manure where it should be. Maintaining good relationships with non-farming neighbors requires both practice adaptation and increased communication.

We have been very pleased with the many conversations with the Vermont Agency of Agriculture, Food and Markets (VAAFM), Department of Environmental Conservation (DEC), Natural Resource Conservation Service (NRCS), Farm Bureau and many others. However, there remains uncertainty about

small farm inspections, citizen complaints and social media attention. UVM Extension and CVFC are working together with other groups to address community concerns. Ongoing initiatives include a community forum in Middlebury, farm inspection workshops, water quality sampling, conservation practices bus tour, nutrient management classes, and our new grazing class. These are all excellent opportunities to learn and engage with farmers and non-farmers.

There is a significant need for farmers and the ag community to talk with our neighbors, be a good friend, and explain what is going on, rather than waiting for a complaint. I am sure that it is truly very hard for non-farmers to understand the science and complexity of agriculture, and why farmers make the decisions they must to keep their business going. The many field meetings, farm open houses, newsletters and conversations this summer have given even more people an opportunity to learn about your specialized farming practices, the inputs used and the products produced which provide economic return to our state.

All of this concerns me, as I see that so much good has come from the caretakers of the land in our fields and forests to make Vermont what it is today. We need to keep Vermont strong, and to me that means we need a strong agriculture and forestry industry. Let's keep the communications open so everyone supports their local farmers of all types.

Have a question for Jeff Carter?
802-388-4969 ext. 332 jeff.carter@uvm.edu



NEWS, EVENTS & INFO YOU SHOULD KNOW

Agricultural Conservation Highlights Tour with Otter Creek Natural Resource Conservation District (OCNRD): October 26. Meet at the American Legion in Vergennes at 1 p.m. We'll talk with farmers who tile drain for field improvement, and inject manure for soil health and water quality. Stay for the banquet (5:00-6:30 p.m.)! Celebrate efforts of farmers who have taken up the challenge of implementing the Required Agricultural Practices, and the 2017 Conservation Farmer of the Year will be awarded. Contact Pam Stefanek, pam.stefanek@vt.nacdnet.net or visit www.ottercreekconservation.org.

NMP Update: Time is almost here to update this season's records and prepare for next. We have set aside dates for farmers who have previously taken our class and finished an NMP with us; look for invitations in your mail.

- Middlebury: November 14 or 28 or by appointment
RSVP: Kirsten Workman, 802-388-4969 ext. 347
- Pawlet: December 6
RSVP: Rico Balzano 802-773-3340 ext. 281
- Castleton: December 7
RSVP: Rico Balzano 802-773-3340 ext. 281

Mock Inspections: Champlain Valley Farmer Coalition and UVM Extension are teaming up to offer "mock inspections" for farmers (only) this fall. For more information contact Nate Severy, 802-388-4969 ext. 348.

Business & Ag Support for You: Receive business planning support specifically for water quality initiatives through UVM Extension Agriculture Business Program. Contact Tony Kitsos for more information, 802-524-6501 ext. 440. Our office continues to provide agronomy support through our Agronomy Conservation Assistance Program and work focused in McKenzie Brook. Contact us!

New Grazing Class! Join us to learn new grazing practices and develop a grazing plan that meets NRCS standards. Free of charge, and includes your copy of *The Art and Science of Grazing* by Sarah Flack. Contact: Cheryl Cesario 802-388-4969 ext. 346.

No-Till and Cover Crop Symposium - Save the date: March 1, 2018 at the Sheraton in Burlington. More information to follow and online: go.uvm.edu/ntcc.

UPDATES ON EVENTS & MORE
SIGN UP FOR OUR E-NEWSLETTER AT
WWW.UVM.EDU/EXTENSION/CVCROPS

WHAT DO I DO NOW?

By Jake Jacobs, UVM Crop Insurance Education Coordinator

The news coverage of damage in Texas and Florida from Hurricanes Harvey and Irma brings back painful memories of Hurricane Irene's visit to Vermont in 2011. While government dollars assisted with recovery from the losses, it was still economically crushing for many farmers.



In the 2014 Farm Bill, USDA risk management for production losses shifted away from providing post-disaster remedies to now requiring that farmers plan ahead. Farmers must determine in advance what to cover and then "buy in" by purchasing federally subsidized crop insurance. Crop insurance, like other types of insurance, has to be purchased before the damage occurs. Unless you have coverage when disaster strikes, crop insurance won't provide any assistance.

Unfortunately, this year's wet weather has proven quite challenging. As a result, many farmers are faced with reduced yields and lower quality crops. Producers with coverage through the Risk Management Agency (RMA) administered federal crop insurance program should contact their crop insurance agent regarding filing claims. Those who purchased crop insurance will be paid for covered losses. Producers should report crop damage within 72 hours of damage discovery and follow up in writing within 15 days. The Approved Insurance Providers (AIPs), loss adjusters and agents are experienced and well trained in handling these types of events.

If you are considering securing a loan to help with feed purchases or other loss-related needs, check with your local Farm Service Agency (FSA) office. There may be some limited funds available for FSA emergency loans. It is only available in certain Vermont counties – but if available, the rate could be lower than what you might be able to get from private lenders.

You need to make informed decisions about managing risk for your farm business. Talk with a crop insurance agent to come up with the best risk management plan for your operation.

Farmers working together for a clean Lake Champlain and a thriving Vermont agriculture.



Join us in sharing what agriculture is doing RIGHT for water quality!

Annual Meeting:
January 2018

Updates at: www.champlainvalleyfarmercoalition.com

DEMONSTRATING SUCCESS: CORN HYBRID TRIALS

By Kirsten Workman, Agronomy Outreach Professional

On a sunny day at the end of August, a group of farmers, technical service providers, and seedsmen gathered in a field off Panton Road. The main attraction? Corn. Twenty-one plots of different corn hybrids from six different seed companies, ranging from 85 days relative maturity (DRM) to 98 DRM. The main goal of this project over the last two years has been to evaluate hybrids in the 85-90 DRM range to see if we can match yields of the more typical 95 DRM corn hybrids most farmers grow on heavier soils.

We are interested in this information because more farmers are adopting the practice of cover cropping and want to get that cover crop established in a timely manner to better their chances of success. An added bonus is that by getting that corn crop off a little earlier, it targets a less risky window in which to harvest, avoiding saturated conditions during harvest that can lead to compaction issues later on. This is of particular interest to farmers who are reducing or avoiding tillage. As this newsletter goes to press, we will be harvesting these plots and gathering information about yield, maturity and quality. These plots will likely prove to be the first corn chopped in the county, allowing ample time to get cover crops planted and manure spread, even in this challenging season.

Replicated, statistically valid agricultural research is a worthy pursuit, and we value the data we can get from those kinds of experiments. However, there is also a lot of information that we can gather from on-farm trials or demonstrations like this corn hybrid trial. Whenever a farmer, a service provider or agronomist decides to quantify or measure something, there is information to be gleaned; some expected and some unexpected. Too often, we decide that something has worked

(or not) in the field without really measuring it. You've been there before, looking at two fields and deciding one would yield less than the other, only to be proven wrong once you get it in the bunker silo. Similarly, you have done accidental research when nature (or a broken piece of equipment) has forced your hand to treat one half of a field differently from the other and seen significant differences.

When you set up a trial or demonstration on your own farm, you tend to discover unintended bits of information. For example, our short season corn plots were intended to assess yield and quality on different soil types and different years. However, we also saw some noticeable differences between hybrids' resistance to northern corn leaf blight and to newer pests like western bean cutworm. This is often the case in these kinds of trials.

Through projects like the Agronomy Conservation Assistance Program (ACAP) funded by Vermont Agency of Natural Resources and Conservation Innovation Grants funded by NRCS, we have worked with many farmers in the Champlain Valley on demonstration projects to compare different methods and practices in farming, to try new and innovative farming practices or crops, and to plant corn variety trials like the one we visited in August. Often we bring other farmers out to learn along with us by hosting field days and sharing results at workshops, meetings and in newsletters. You can do this type of research, too. USDA's SARE program has a great publication explaining how to do your own on-farm research: go.uvm.edu/sare-research and they fund more in-depth projects for farmers and others: www.nesare.org/grants.



(below) Can quicker corn enable cover cropping? We evaluated 21 plots of different hybrids from six seed companies to see if yields could match the customary 95 DRM. Stay tuned for the results of this year's harvest ...





GRAZING AS A NEW MANAGEMENT PRACTICE

By Cheryl Cesario, Grazing Outreach Professional

Successful grazing systems develop when there is farmer involvement in the planning process. Having a plan is important and needs to be built around the goals of the farmer.

Jonathan and Maryann Connor of Providence Dairy in Addison successfully implemented a new grazing plan this year. The Connors operate a well-managed Holstein herd, produce high quality milk, and they participate in the Ben & Jerry's Caring Dairy program with the St. Albans Co-Op. Over their five years in the program, Jonathan and Maryann were able to focus on energy efficiency, animal care and water quality improvements. For the Connors, grazing management was the next logical area to explore.

One of their goals was to save money by reducing machine operation costs associated with the tillage, planting and harvesting of annual crops. Jonathan wanted to seed down some of his corn ground near the barn and

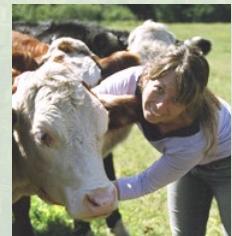
convert it to high quality pasture so that all acreage closest to the barn could be grazed. Another goal was to reduce the herd's cull rate by promoting herd health with cows on grass. To address these goals, we began planning a grazing system from scratch. While it would have been very feasible to fence the entire farm for grazing,

we started conservatively. We chose enough acres near the barn to provide 30% of the cows' daily dry matter intake from pasture. When we were done, we had a plan that included high tensile fence, temporary poly-wire fence, animal laneways, water pipeline, water tubs, frost seeding on the hay fields, and "forage and biomass planting" (the NRCS term for seeding down annual crop land).

The Connors grazing project was funded by NRCS and last fall they got the needed infrastructure in place. As an added bonus, the timing of the NRCS contract was such that we were able to capitalize on the availability of a Dairy Improvement Grant funded by Ehrmann Commonwealth, through the Connors' milk buyer, the St. Albans Co-Op. This matching grant provided additional funds to put towards their grazing infrastructure.



Jonathan (above) and Maryann Connor of Providence Dairy in Addison implemented their new grazing plan in 2017.





When the pastures began to grow in May of this year, Jonathan and Maryann were faced with the challenge of turning 90 large Holstein cows loose from their tie-stalls. The cows had to navigate across the gutter, keep their footing going down the alleyway, and get out the door. To minimize chaos, the Connors started small by turning out 27 cows, then increasing the number gradually, until the entire herd was going out to graze. In their system, cows graze during the day only, going out after morning milking at approximately 9:00 a.m. and coming in around 3:30 p.m. for the evening shift. Jonathan uses single strand polywire with fiberglass posts to give the cows a new strip for each day's grazing.

The wet weather trend that began in early May presented some challenges, as the farm is on heavy clay soil. He was holding the cows in on wet days so they wouldn't punch up the pastures when the ground was soft. The sporadic nature of cows going out or staying in presented some challenges with keeping the feed ra-

tion consistent and was a bit confusing for the cows trying to get used to a new routine. With over five inches of rain in May, it was certainly a tough way to start a new grazing endeavor. However, the farmers made good decisions, and trusted their intuition to preserve pasture quality for the long term.

Throughout the summer, Jonathan had to balance when to turn the cows out, trying to minimize mud issues around watering areas and gate openings. Cows were going into pastures when the grass was 8 to 10 inches tall, and what they weren't eating, they were trampling into the ground. This

resulted in a nice mat that protected the soil during wet conditions and minimized damage.

So here we are, almost through the first grazing season on this farm. There have been challenges and frustrations, but Jonathan says, "While it is more work, it just feels right having the cows outside instead of chained up. I love seeing them outside eating grass. I think they are healthier and definitely more mobile."

Read more about this project in my three-part series in *On Pasture*: www.onpasture.com/2017/08/07/dairy-cows-head-to-pasture-for-the-first-time-on-providence-farm/

NEW GRAZING CLASS!

Join our four-session class to learn new grazing practices and develop a grazing plan that meets NRCS standards. Free of charge, and includes *The Art and Science of Grazing* by Sarah Flack. Upcoming dates in November/December.

INFO: CHERYL CESARIO 802-388-4969 EXT. 346



Slugs like the dusky arion (*Arion subfuscus*), above, or the gray garden slug (*Deroceras laeve*) can cause significant crop damage in fields with reduced tillage. (Image: By Ken Hotopp©, courtesy Carnegie Museum of Natural History.)

MANAGING SLUGS BEGINS IN THE FALL

By Rico Balzano, Agronomy Outreach Professional

Reducing tillage in annually cropped fields lowers labor costs, fuel costs and soil loss from erosion. Reduced tillage, especially in no-till/cover crop systems, also increases the amount of residue on the soil at planting time. Besides drastically reducing soil erosion, crop residue provides food and habitat for soil fauna such as earthworms, beneficial insects and, yes, slugs.

Slugs are mollusks, closely related to snails. They live throughout the eastern United States and exist in all cropping systems. Slugs are active at night, and feed on decaying organic matter and plant foliage. During the day, they hide under plant residue, soil clods and in seed trenches. Slugs can overwinter in all life stages, except in extremely cold winters without much snowpack. Although there are many species of slugs, the gray garden slug (*Deroceras laeve*) has been most often associated with crop damage in the Northeast. The life cycle of this slug seems to coincide with cropping activities due its large egg hatch in mid-spring, when row crops are in the seedling stage and most susceptible.

The easiest management strategy is tillage; yet this works against the goals of reduced tillage systems. However, in fields with a history of slug damage shallow disking or vertical tillage may be necessary. This shallow tillage may be done in the spring or the fall. At planting time, row cleaners move residue away from the plant row and help warm the soil to achieve germination and fast early growth, as most slug damage occurs immediately after emergence. Cover crops that produce a moderate amount of residue will limit habitat and provide easier conditions for row cleaners to be effective. A good example is the rye/oat cover crop mix highlighted in the summer newsletter issue. This mix provides excellent green cover in the fall without excessive biomass production in the spring. And finally, making sure the seed trench is closed well may eliminate significant slug damage, as open seed trenches are excellent slug habitat.

Another strategy some growers have employed is to spray 30% nitrogen (mixed 50:50 with water) solution at night when the slugs are out. This meth-

od provides no residual control and may have to be repeated to be effective.

Also, chemical control options are limited, often not economical, and may be washed away by significant rain. Recommended seasonal strategies to reduce slug damage in reduced tillage fields are:

Fall:

- Shallow tillage (light disking or vertical tillage) after harvest.
- Planting a cover crop mix such as a rye/oat combination to produce a moderate amount of residue and biomass in the spring.

Spring:

- Shallow tillage (light disking or vertical tillage) before planting.
- Using row cleaners to move cover crop and plant residue away from the row and help warm the soil.
- Using the proper closing wheels to ensure the seed trench is sealed properly.



HELPING FARMERS ADAPT TO A CHANGING LANDSCAPE

By Nate Severy, Agronomy Outreach Professional

With the implementation of the new RAPs now underway, it is important for us all to understand the rules, how they affect us, and what we can do to not only meet those requirements, but to excel at achieving them. We have been organizing farm workshops in October and November to help small farm operators understand what goes into a Small Farm Inspection. These “what to expect at an inspection” field days will be held at small farms which have already been or will soon be inspected. We will do a walk-through of the farmstead, and possibly a field, too. We will have open discussions on what is and is not a water quality concern, and share practical ways to address any identified problems. While it can be confusing and stressful, these meetings will show farmers that there are practical solutions that can strengthen their farm.

In addition to inspections, recordkeeping is going to be an increasingly important part of all farm operations. We recently completed a project providing selected farmers with manure recordkeeping books. These books create an easy way to track and file information about nutrient applications and were originally developed to help custom manure applicators meet the recordkeeping requirements from Act 64.

On a similar note, custom manure applicators will be completing their certification process this winter. Last spring and winter, applicators attended workshops hosted by UVM Extension and VAAFM that allowed them to legally spread manure during the 2017 cropping season. In late December and early January, there will be a series of one-day trainings

that will culminate in custom applicators receiving a five-year certification. The trainings will be similar in format to that of the Pesticide Applicator Certification Program (anyone who applies pesticides for agricultural, residential, industrial, etc. uses must become certified before using pesticides). The morning training session will go over the requirements. Lunch will be followed by a written test in the afternoon. We are currently working with our UVM Extension colleagues in St. Albans to develop a manure training manual that will be publicly available.

As we progress into this new era of heightened regulations and extreme public pressure, it is easy to become discouraged about the ability to do business and make a respectable living farming in Vermont. Of all the things farmers are good at, stepping up and moving forward when you are most discouraged is one of the most enduring traits. It is important that we all strive for excellence and to be the best possible versions of ourselves. While no one person and no business is perfect, there are consequences for all when we fail to put our best foot forward. The ability to grow and strengthen our community and pave the way for a successful and vibrant future lies within ourselves, we just have to make the personal decision to do it.



(below) UVM Extension Agronomy Outreach Professional Nate Severy describes an innovative cropping system that includes cover crops and no-till.





23 Pond Lane, Suite 300
Middlebury, VT 05753

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CHAMPLAIN VALLEY CROP, SOIL & PASTURE TEAM



Middlebury, VT
802-388-4969 • 800-956-1125
cvcrops@uvm.edu
www.uvm.edu/extension/cvcrops

Project Leader

Jeff Carter, Agronomy Specialist

Agronomy Outreach

Rico Balzano

Cheryl Cesario

Nate Severy

Kristin Williams

Kirsten Workman

Administration

Karen Gallott

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**Farmers
Working Together**



**For a Clean
Lake Champlain &
Thriving Agriculture**

Fall 2017

In this Issue:

- President's Message
- Upcoming Events
- Farm Safety Resources
- Business Member Spotlight:
Redline Drainage
- Farmer Member Spotlight:
Deer Valley Farm
- Program Spotlight :
Clean Water Week Event
- Board of Directors & Staff
- Photos from the Field



Champlain Valley Farmer Coalition, Inc.

23 Pond Lane, Suite 300
Middlebury, VT 05753
(802) 388-4969 x348

www.champlainvalleyfarmercoalition.com
info@champlainvalleyfarmercoalition.com



Photos:

(above) Savoy cabbage growing at The Farm at VYCC in Richmond, Vt.

(below) Chopping corn research plots at Vorsteveld Farm in Panton, Vt.

A MESSAGE FROM THE PRESIDENT

Fellow CVFC Members,

As most of you know there have been two tragic accidents in the past weeks that have impacted our agriculture community—the loss of Jim Foster Jr. in a farm accident and the loss of Paul Boivin in a motorcycle accident.

Our hearts are with the families of both men, each of whom made significant contributions to not only the farming community, but the larger Addison County community as whole. Each was, in their own right, a pioneer in our ag industry. Jim was an owner of Foster Brothers Farm and Vermont Natural Ag Products, Inc., where he managed the operations of their MOO™, Foster Brothers, Allied and Nutripeat® compost products. He also served as a leader of Addison County Fair & Field Days, Vermont FFA Foundation, the Central Cemetery Association and was a devoted father. Paul and his brother Mark, whom were dairy farmers in the past, were some of the first in our area to adopt no-till and zone till practices in their current grain operation. Paul was constantly looking into the future of ag production, seeking how to do things better and looking for what we could learn along the way. He also served his community through the planning commission, Town Line First Response, Addison Fire Department, Vergennes Rescue Squad, Mad River Glen Ski Patrol, the Farm Medic Program and the Knights of Columbus.

Both will be missed by many, and I encourage all of us to be safe in our own day to day lives.

Brian Kemp

Brian Kemp, President



**Paul Boivin
1952—2017**



**James Foster Jr.
1970—2017**

CVFC has support from the UVM Extension Champlain Valley Crop, Soil & Pasture Team, the High Meadows Fund, and the Keep Local Farms Fund

