



*Conversations From the Field, cont.*

What does the warm spring mean for our cropping programs? One of the biggest concerns is the impact on pest populations and lifecycles.

According to Ken Wise of the New York State Integrated Pest Management (IPM) program, it is very difficult to predict what a mild winter and early spring can do for an insect pest population. Planting dates and crop development also play a large role in an insect pest population. The best thing to do is to be out there monitoring crops for pests and using the principles of IPM to make well-informed decisions on management issues over the coming growing season.

out assessing alfalfa fields in the next few weeks. Frost damage from last week was seen on north-facing alfalfa and clover stands. Alfalfa stand assessments are ongoing.

In addition to pest populations, the criteria for ideal planting and germination conditions need to be considered in crop management this spring. Rapid corn germination and seedling growth needs a steady soil temperature 60°F. Bill Cox, Professor and Corn Guru of Cornell, says to plan on planting corn anytime after April 15 in regions that do not get killing frosts after May 10 (i.e. Finger Lakes and close to the Great Lakes) if

Bill's reminder: "If soil conditions are wet in late April or early May, there is no need to mud it in because there is very limited yield loss, if any, for corn planted from 15-20 May compared with corn planted from 20-25 April. Early planting does not guarantee higher yields: it guarantees lower grain moisture at harvest or an earlier silage harvest date."

On the pest front for corn, Ken Wise noted that research has shown that Corn flea beetle does survive better with mild winter conditions. Corn flea beetle is the vector for Stewarts wilt in both field corn and sweet corn. The good thing is that most field corn hybrids have resistance to Stewarts wilt.

The ideal soil temperature for rapid soybean germination and emergence is 77°F. ACS Agronomists have observed that cold spots across a field or a cold rain prolong seedling development and impact roots for the whole season. Seed treatment is an important consideration for early planted soy.

The first round of nitrogen on wheat is on! Weed sprays are going on through the first week of April.

Want independent crop management advice, someone to bounce ideas off of and get sound input, and someone to help you wade through the information and constantly changing conditions?

Call your ACS Agronomist and make the most out of your 2012 cropping program!

Happy Spring!  
—The ACS Agronomy Team

## Conversations from the Field

### Growing Degree Days (GDD)

are used to predict soil temperatures, crop and pest development, and guide crop season decision-making. To date, the 2012 GDD accumulations are ranging from 75-120 GDDs in Central-Western New York/Northern Pennsylvania to 45-75 GDDs along the New York-Vermont border (Figure 1). The Northeast Regional Climate Center data show that these accumulation ranges are ahead of schedule an average of 50-110 GDDs, or 22 days (Figure 2). Current soil temperatures in Ithaca are hanging steady at 45-47° at 4 inches deep and 35-37° at 8 inches deep.

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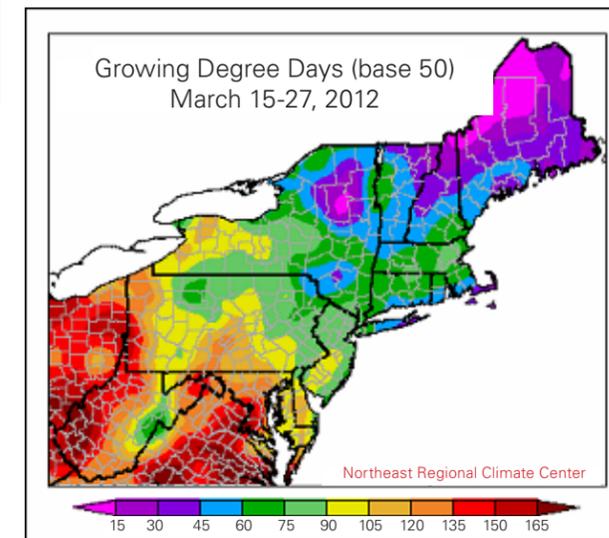


Figure 1: Accumulated Growing Degree Days for the 2012 crop season (base 50) for the Northeast Region. Source: Northeast Regional Climate Center

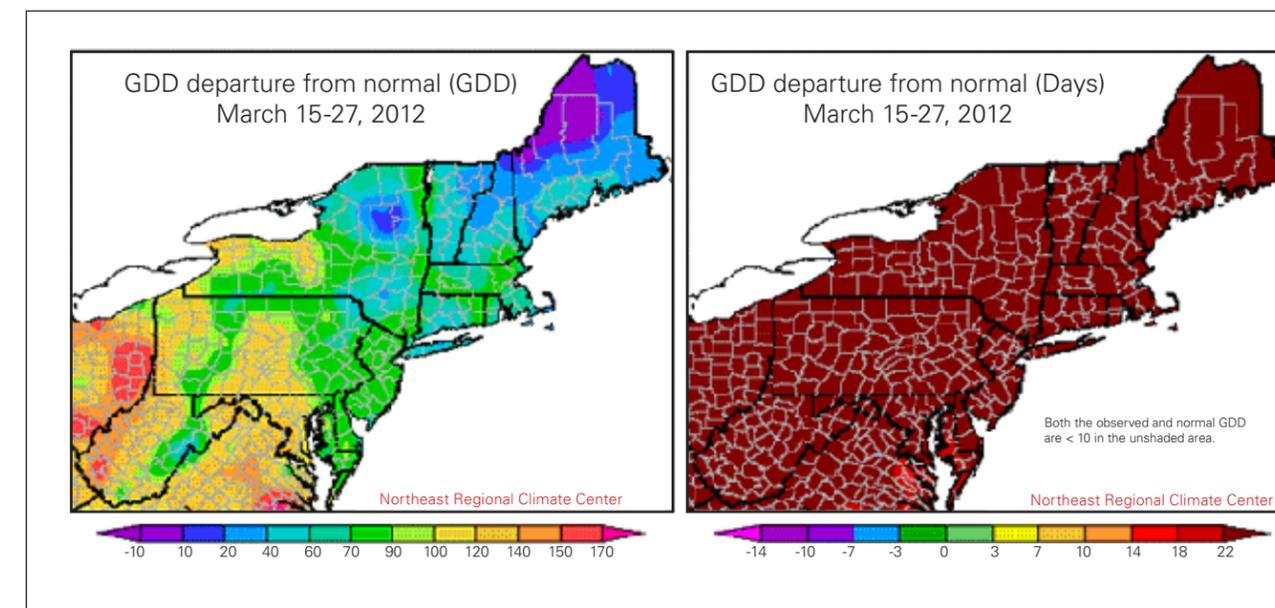


Figure 2: Departure from Long Term Average Growing Degree Days. The entire northeast region shows a conservative estimate of 22 days ahead of the Long Term Average. Source: Northeast Regional Climate Center

## What does the warm spring mean for our cropping programs?

That being said, Ken and ACS Agronomists suggest early Alfalfa weevil activity is a strong possibility. Ken noted that Alfalfa weevils overwinter in hedgerows and field margins as adults. A mild winter might help more of the adults to survive. Also, weevils hatch at 300 GDDs. The mild winter combined with our warm spring could lead to larger overwintering populations and earlier hatchings. South-facing slopes and hilltops are a good place to look for early weevil activity.

Overwintering cutworms or army worms have also been observed by ACS Agronomists for the past two years. Look for these pests while

the soil is dry. He warns that in regions where it can frost in mid-May (Genesee Valley, So. Tier Valleys, etc.), you may want to be a bit careful.

The main thing to consider after April 15 is soil moisture: if conditions are dry enough to plant with zero compaction, do it. Bill suggests paying attention to the forecast for the next 5 days. If it is going to be cold (highs in the 40s) for the next 5 days, then wait. But if soil moisture conditions permit and the forecast is reasonable for the next 5-10 days (highs in the mid-50s at least), begin planting, even if the current soil temperature is 45.

## Vertical Tillage

- Is an approach to tillage that works on the premise that soil is lifted and loosened to achieve a uniform soil density in the root zone AND conserve soil carbon and the soil profile.
- Where soil conservation is a main objective, shallow one-pass systems that do not mix soil are better than deep vertical tillage and conventional tillage.
- Where corn residue reduction is main objective, more aggressive shallow vertical tillage with soil mixing is needed.
- Where heavy field traffic leads to compaction, both shallow vertical tillage combined with deep vertical tillage is needed to achieve the root zone density uniformity.
- A review of completed and preliminary studies show a trend toward comparable or higher yields in vertical tillage system compared to conventional tillage, but these trends were not found to be statistically significant.
- For more information, please contact your ACS Planner or Service Manager.

## Community Relations: New to the Neighborhood

When Lamb Farm purchased a new facility, the managers sent out the postcard below to members of the neighborhood as an introduction to the farm, an explanation of what they do, and the farm philosophy in order to help ease the transition. The postcard received a positive response. If you would like assistance with a similar project, please contact your ACS Service Manager or Planner.

## We Care

### About our local economy

We employ 25 full time employees, plus we help to support various local community businesses.

### About our environment

We operate about 2,000 acres. We are committed to sustainability & are exploring ways to improve our "green" practices. For instance, we're making the transition to using recycled solids as bedding.

### We Produce Food to Feed You.

Ownership - Lakeshore Dairy, LLC is owned by Jonathan & Matthew Lamb, and Jim Veazey. It is operated with the assistance of Managers Janette Veazey-Post and Doug Welker. The farm milks 1500 cows, producing about 5.5 million gallons of milk yearly.

### About our cows

Cows make the most milk when they are comfortable and relaxed. We strive for minimal stress on our cows through comfortable bedding of sawdust & gentle husbandry.

### About our quality

We provide a nutritiously balanced diet and fresh water at all time to our cows to ensure that they will make the highest quality milk. This is important because our milk is being used in the production of local dairy products, such as Upstate intense milks and Bison chip dips.

### About you

Due to the extremely wet year, it has been a struggle to get the harvest & manure spread. We'd like to take the time to thank you for your patience & understanding as we have been transitioning into this facility. We hope to have a good working relationship within the community. Please contact us with questions!

## Soil Fertility Issues After Flooding

by Janet Fallon

We are off to a record-setting start this year: peepers are 2 weeks early; fields are dry enough for early manure applications and tillage. Everyone is optimistic about getting off to an early start this year... quite a switch from 2011's wet spring and wetter fall. Unfortunately, last year's flooding can have some short- and long-term effects on soil fertility and crop performance, especially with regard to phosphorus.

Zinc can also be an issue. Flooding that destroys crops or prevents planting altogether can result in a decreased population of beneficial mycorrhizae (fungi) that colonize plant roots and enhance P and Zn uptake. There can be other effects as well, including soil erosion, soil deposition, soil compaction, and damage to other important soil microbes. Soil compaction can limit the availability of nutrients because roots just can't get to them, but there may actually be leftover nutrients due to crops that were left in the field as a result of the flooding. For all these reasons, it may be a good idea to pull a new soil sample to see what you really have.



Photo courtesy of Dr. Doug Beegle, PSU

Consider other management changes as well. For example, band applications of phosphorus, potassium, and zinc may be more beneficial than broadcast applications after a year like 2011, especially if soils are compacted. Don't forget to inoculate legumes (alfalfa, clover, and soybeans) this year either, even if that legume has been planted on that field in recent years. Likewise, in-season N testing on corn (PSNT) may be more helpful this year as well, due to additional N losses resulting from leaching and denitrification last year. Talk to your crop adviser for other management practices that may help restore the health of your flooded soils.



The above photo shows a Low Flow Collector. Part of the operation and maintenance of a VTA for bunk silos includes cleaning all screens in the Low Flow Collector after each rain. In this example, the two rectangular screens (one with larger holes, then one with smaller holes) and the yellow debris trap need to be cleaned after each rain. When this maintenance is overlooked, it can lead to a "kill zone" in the VTA. If farms are in the habit of checking and regularly maintaining the Low Flow Collectors, it could potentially save money in the future.

## Manure Application Planner: Is Yours Up-To-Date?

Your Manure Application Planner provides the maximum allowable manure rates for each field. You must remain at or beneath those rates, or you will be out of compliance with your CAFO Permit, not to mention wasting valuable nutrients. How can you make sure that you are still in compliance? Call your ACS Service Manager or Planner and give him or her the most up-to-date manure spreading records available, ensuring that all nutrients are accounted for. You can fax or e-mail records, mail copies (don't mail the originals), give copies to your Service Manager or Planner during an already-scheduled visit, or ask ACS to pick the records up.

## Important Tips for Operation and Maintenance of VTAs (Vegetated Treatment Areas)

- Inspect and repair treatment areas after storm events to fill in concentrated flow paths, remove flow disrupting sediment accumulation, re-seed disturbed areas, and take other measures to prevent concentrated flow.
- Maintain or restore the treatment area as necessary by periodically grading when deposition jeopardizes its function, and then reestablishing to herbaceous vegetation.
- Conduct maintenance activities only when the surface layer of the VTA is dry enough to prohibit compaction. Harvest VTA as appropriate to encourage dense growth, maintain an upright growth habit, and remove nutrients and other contaminants that are contained in the plant tissue. Remove the harvested vegetation from the VTA.
- Clean out settling facilities for Concentrated Livestock Area at regular intervals where excess manure enters the system.
- Clean out settling facilities for Silage Leachate Systems after each rain event. Clean all screens and inspect all conduits to ensure that they are working properly.
- Inspect and maintain the pretreatment system and evaluate the source for volume and concentration changes.
- **Farms should call their ACS planner or their engineer if they notice a "kill zone" developing in the VTA, or if they think that the system is not working properly. It is easier to fix a problem when it occurs than to wait and fix all of the subsequent damage that the problem will cause.**

## Check that Seed Bag Tag!

The coating on this alfalfa seed makes it heavier than uncoated seed, which decreases the number of seeds per pound. Combined with a germination

INGREDIENTS	
65.84%	PURE SEED
.04%	OTHER CROP
34.09%	INERT MATTER**
.03%	WEED SEEDS
GERMINATION	70%
HARD SEED	20%
TOTAL GERMINATION & HARD SEED	90%
NOXIOUS WEED SEEDS: NONE FOUND	
**34.00%	COATING MATERIAL
**	.09% INERT MATTER

rate of 70%, you might want to consider planting more pounds of seed in the ground per acre. For example, if your target seeding rate is 14 pounds of alfalfa per acre, consider planting this seed at 30 lbs per acre for best results.