Feed costs are, hands down, one of the greatest expenses on dairy farms. Farmers have limited options, for controlling the price of purchased grains. Buying contracts at a fixed price is one way. They do have control over the timing of their hay crop harvest. All farmers understand that by harvesting high quality forages they can lower the amount of purchased grain they need to balance a ration. Harvesting young, nutritious home-grown forages supports savings on the grain bill.

To support and encourage the harvest of peak quality hay crop for first cutting Betsy and Janice spent the month of May measuring and reporting the status of crop development to regional dairy farmers, nutritionists and agriservice personnel. The information was sent out weekly through emails, texts and website posts.

Beginning in early May they measured the height of alfalfa of 47 fields on 24 farms across the 5 counties.

Research has shown that the height of alfalfa can serve an indicator of the level of semi-digestible fiber in the plant called NDF (neutral detergent fiber). The heights of alfalfa can also serve to predict the quality of nearby grass fields. University research has also shown that by decreasing NDF by 1%, Feed consumption or Intakes increase by .5 pounds of dry matter which can support the production of an additional pound of milk.

The timing of the first harvest of the year is important because the bulk of the annual yield is in the first cutting, approximately ½-⅔ of the full year’s harvest and very importantly sets the interval for the harvests that follow.

Each spring progresses differently. This spring, conditions were slow to warm up as evidenced by the lowest amount of growing degree days on record by May 14th. Through the cool weather, however, grass stands continued to mature normally whereas alfalfa seemed to grow far more slowly.
By the third week of May, some warmer weather hit the region and growth of alfalfa of over 6-7” in one week was observed. The team’s phones were ringing constantly with farmers asking about cutting windows and timing of harvest. Several farmers shared samples of scissor cuts and harvested haylage and were very pleased with the results that they received. By email alone, the team reached over 230 people across the region. Several nutritionists and agriservice persons shared it with customers and clients, multiplying our efforts greatly.

Examples of some of the feedback received follow:

- *I have been reading your e-mails with great interest! We mowed our grass yesterday, I think it was very near optimum. Thanks for your service.*
  Doug Riehlman, Dairy Farmer (Cortland County)

- *We just chopped the most beautiful haylage ever!*  
  Jim Miller, Dairy Farmer (Broome County)

- *Half done with our hay, it’s nice stuff. Quite heavy too!*  
  Brock Whittaker, Dairy Farmer (Broome County)

- *I forward this to our whole dairy team weekly and we go through the charts with customers. We at Keystone certainly appreciate your work! Thanks!*  
  Gabriel Carpenter, Dairy Specialist / Dairy Sales Manager, Keystone Mills

- *Great job this year Betsy. People are talking about it. Thanks,*  
  Dave Stoner, Ward & Van Scoy-Owego

- *Nice report.*  
  Ed Gallagher, DFA

- *We just chopped the most beautiful haylage ever!*  
  Jim Miller, Dairy Farmer (Broome County)

It was gratifying to know that people were following our measurements and looking forward to receiving them. Some asked to be added to the mailing list to receive the notices directly. When grass harvest began on target around the 17th of May we knew we had a positive impact on First Cutting Harvest.
New York State is the third leading producer of dairy products in the United States. Dairy Grazing Apprenticeship (DGA) is working to keep it there. DGA is a beginning dairy farmer training program that can help transition the state’s dairy farms to the next generation.

In the 20 years from 1990 to 2010, New York lost half of its smaller dairy farms, and, with an aging population of farmers, the remaining nearly 5000 farms are a threatened species. The decline of small family farms negatively impacts the rural communities in which these farms are located, and also changes the character of the landscape of upstate New York. The loss of 100 dairy farms in a county could cost that community over $30 million per year. With twice as many farmers over 65 as under 35 years old, who will be the next generation of small, grazing dairy farmers?

Unless born into a dairy farm business, a young person with an interest in dairy farming has difficulty getting a foot in the door. Barriers can include a lack of access to farmland, capital, and lack of skills. DGA was created by and for farmers to address these challenges. Wisconsin-based grazing dairyman and former agriculture instructor, Joseph Tomandl, III, has witnessed the decline of the family dairy farm firsthand, so he spearheaded the development of a formal apprenticeship in “managed grazing” dairy production to strengthen dairy infrastructure and create opportunities for current and future dairy farmers like himself.

The program is structured similar to other apprenticeships in the skilled trades such as carpentry or plumbing. As such, it prepares the “apprentice” through work-based learning as a fulltime paid employee. Thanks to DGA, “Dairy Grazer” is now a federally recognized occupation. According to DGA’s website, “A dairy grazer is a farmer who uses managed grazing. In managed grazing systems the majority of farm acres are planted to perennial forages and cows are rotated through paddocks of high quality grasses that are allowed to rest and regrow. Using this cost effective method, dairy graziers are able to restore natural resources, produce high quality milk, and remain profitable in both conventional and value-added markets.” DGA Apprentices work under the mentorship of approved “Master Dairy Graziers” for a duration of 2 years. At the end of the program, it is not unusual for this relationship to lead to business partnership or even a transition of ownership.

The first accredited Apprenticeship for farming in the nation, DGA is now a National Apprenticeship under the U.S. Department of Labor-Employment and Training Administration and can be implemented in any state.

Up until now, DGA’s efforts have been mainly centered around Wisconsin and its neighboring states, where the majority of Master Dairy Graziers have applied and been approved. Currently, there are efforts to foster the development of DGA in the Northeast. The Cornell Small Farms Program is partnering with an advisory committee of dairy farmers, extension personnel, and
other state industry professionals to formally organize the expansion of the DGA to NY.

Why an apprenticeship? Isn’t that for industries that required skilled labor?
Farming is a skilled profession, and that’s why DGA is such a great opportunity for both Master Dairy Graziers and Apprentices. The Apprenticeship offers a formal but flexible structure that both Apprentice and Masters follow to ensure comprehensive skill development for an aspiring dairy farmer. In addition to learning the practices of running a dairy farm, Apprentices gain management skills. In return for being a mentor, the Master gets a long-term, dedicated and engaged employee who might even become a business partner in the future.

Why Grazing?
Managed grazing is a low-cost, efficient forage production system that combines profitability and environmental stewardship. For beginning farmers, buying in grain feed can be expensive and buying machinery to harvest their own crops is a significant investment. Managed grazing reduces costs, while at the same time improving animal and environmental health that many successful dairies practice. It also means increases access into dairy farming for younger people who do not have much capital.

What does one do with a Dairy Grazing Apprenticeship?
There are a few options! DGA generally prepares Apprentices to own and manage their own farm. An Apprentice might find an avenue to their own farm through the Apprenticeship by gaining equity in livestock or land. The Master and Apprentice can plan to become business partners at the beginning of the Apprenticeship, or the Master Grazier might plan to transition the farm to the Apprentice all together. DGA is flexible and provides support for the unique goals of each Master-Apprentice pair. It is also a good way for a young person to try dairy farming before they commit to it completely.

What does the DGA involve?
DGA is a two year, 4,000 hour hybrid program of on-the-job training and related classroom instruction. The Master Dairy Grazier and the Apprentice, with the guidance of a DGA Education Coordinator, use the structure of a training manual or “the job book” to ensure the development of the specific skills that the Apprentice will need to becomes a successful dairy farmer. The related instruction includes in-person or online classes, as well as pasture walks, conferences, and other networking opportunities. For NY, this aspect of the Apprenticeship is still in planning.

Advice for how best to ensure a successful apprenticeship?
As Fay develops his role as a DGA Education Coordinator, he sees the easiest situations are where a farmer already has or finds an employee and wants to run them through the program. In some cases, parents are running their children through DGA. These are the teams that can immediately benefit from this program. If we can find young people with the desire and willingness to dairy, there are so many opportunities with farmers who are nearing retirement. To Fay, that would be the best outcome of this program – to keep these small dairies viable.

What are your goals for DGA in New York?
We are at the first step of a long journey with the DGA in New York. I am looking forward to having active pairs of masters and apprentices. After two years or so hopefully the apprentices will move into positions on viable grazing dairies- that would be the first level of success. We hope to build on the success of the first round of apprentices which will further allow DGA to grow and expand in New York.