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The Helping Hand to Better Agriculture in Albany, Columbia, Rensselaer & Schenectady Counties

CORNELL COOPERATIVE EXTENSION
Crop Soil News

Where Are We With Haylage Harvest and Where Are We Going ?

At the end of April we were as much as 10 days ahead of 2007. That came to a screeching halt with the cold weather of the first days in May. At the present time, May 8, we are 5 days ahead of 2007 and the 1997-2004 average. With the predicted track of below normal temperatures and wet conditions, the accelerated growth could slow dramatically. This puts clear alfalfa (the last haycrop you mow) at about May 30. Mixed stands and straight grass are much earlier.

This is good news in two forms. A number of farms have not been able to plant corn due to wet conditions. This will give them a slightly bigger window in which to get that started. Second, the cool temperatures and moisture should produce first cutting forage of very high quality if we get sufficient sun to generate the digestibility we need. Conversely, extended cloudy weather and then a burst of sun will mean everyone cuts before the forage has a chance of increasing digestibility. With the high price of grain, haycrop forage quality will be critical to profitable milk production. For your farm the time for peak quality is to cut when:

Alfalfa near the 100% Grass field is 15 inches tall	Cut Your Pure Grass
Alfalfa in 50% Alfalfa: 50% Grass Stands is 24 inches tall	Cut Your Mixed Stands
Alfalfa in nearly Clear Alfalfa Stands is 30 - 32 inches tall	Cut Your Clear Alfalfa

As of this date, alfalfa across Western Rensselaer County is 11 to 13 inches tall. Columbia County is taller, Western Albany and Schenectady Co. is shorter. It is quickly approaching the level at which you should start mowing clear grass stands. Well drained fields are ahead of the poorly drained ones. North slopes are considerably behind South facing slopes.

Grass has a much narrower window than alfalfa for peak quality. If we get very cold and wet conditions, grass could violate the rules and actually decrease in NDF (improve forage quality) with time. For most years, being early on grass is better than late. Cutting ahead of optimum on grass will simply move some of the yield to the second cutting giving you the same overall yield but much higher quality for both cuttings. If weather delays clear alfalfa harvest, raising the cutter bar will greatly improve forage quality (this does NOT work with grass).

YOU WANT TO BE HALF COMPLETED WHEN YOUR FORAGE REACHES OPTIMUM QUALITY. STARTING AT OPTIMUM QUALITY MEANS ALL YOUR FORAGE IS LESS THEN OPTIMUM unless you can harvest the entire farm in one day. Only you know how many days it normally takes for first cutting. Half of those days should be before the crop is ready. Farms can use the above chart to get more of their forage at peak quality by selecting what field to mow based on slope face/drainage factors rather than where it is in relationship to the barn.

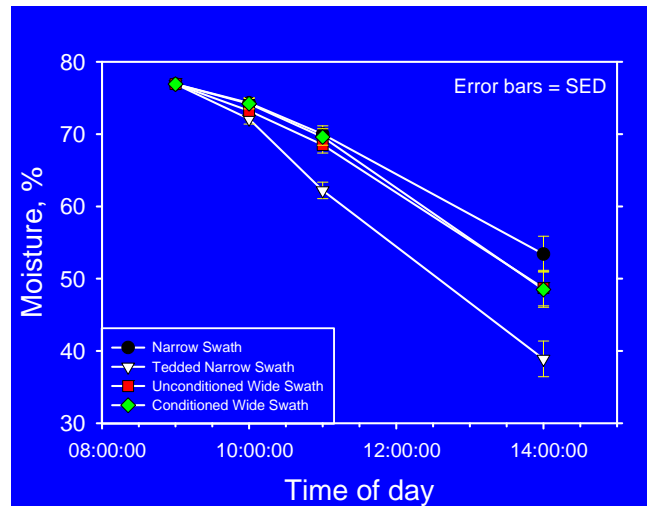
Helping You Put Knowledge to Work

Cut Haylage or Plant Corn?

The simple answer: normally haylage decreases in quality faster than delaying corn decreases in quantity (yield). A delay in corn planting has little if any impact on forage quality. A few day delay in haycrop has a significant impact on the milk producing ability of that forage. If temperatures are in the 70's with plenty of sun, the haycrop advances quickly. A cool or cold day dramatically slows the maturity. When it is time to cut haycrop, stop planting corn and cut. Delayed corn often decreases its maturity and can make up some of the season.

New Opportunities For Wide Swath Advantage:

The flaky weather will mean one day haylage harvest is even more critical. Farms without mowers that can open the same width as the cutterbar can still gain the haylage-in-a-day advantage. Dr. Cherney at Cornell and our work on a Rensselaer Farm has found that mowing and tedding will spread the crop to full width, with a concurrent HUGE increase in the drying rate. Note on the graph on the right, that mowing at 9 am and immediately tedding to a full swath width, haylage was ready to chop by 11:30 while the other was in the afternoon. In heavy first cut alfalfa both the wide swath not conditioned and the narrow swath plus tedding were ready the same day they were mowed, while the traditional narrow was not ready until the next day. With the weather predicted for the end of the month you may not get that next day to complete harvest. In 2004 we had similar weather conditions where there was one 2 day harvest window in 14 days. During that same time there were 6 single day windows with no rain. In addition, there were days that had thunderstorms in the evening where the farmers who wide swathed still got haylage mowed and ensiled that day also. Wide swath-same day haylage gave you six chances for success rather than one.



Yes, until you get a wide swath mower, tedding means an extra trip over the field that costs \$8/acre for labor, machinery, and fuel. Our work on same-day-haylage found 300 lbs. more milk/ton of dry matter. For first cutting haylage this means \$75/acre increase in potential milk for the feed that comes off of just the first cutting of that acre, if it is harvested wide swath – same day. Thus the tedding to allow same day harvest of haylage returns 10 X over the cost to do it. If it rains for 2 – 3 days the return is even greater than that.

More Acres In A Day:

Research we conducted has found that mowing in the evening in narrow swath will burn off the energy through respiration. Mowing into a full width swath at sunset, on nights with radiant cooling (mostly clear), preserves the digestible components. The next day the haycrop mowed at 9:30 am dried faster but both were ready to chop at the same time. Thus for farms with limited mowing capacity, mowing late into the evening or night, in full width swath, could allow you to get more haycrop harvested in one day yet keep the high energy in the forage. Mowing in the heat of late afternoon will not preserve the forage energy.

A key step in successfully sneaking in same day haylage is to have the plastic ready to drop over the bunk before the downpours hit. In 2004 and 2006, those that didn't want to bother were stuck with layers of very wet butyric silage in the middle of very good silage. You went through all the effort to dry the forage to the correct moisture, don't let the rainfall undo your hard work.

The milk to feed ratio is dropping and so buying your way to profitability is not going to work in dairy. Feeding your way by producing and storing top quality forage is now more critical to a profitable dairy.

Sincerely,

Thomas Kilcer
Extension Issue Leader
Regional Crop and Soil Educator



“It is the crops that feed the cows that make the milk which creates the money.”