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# Crop Soil News

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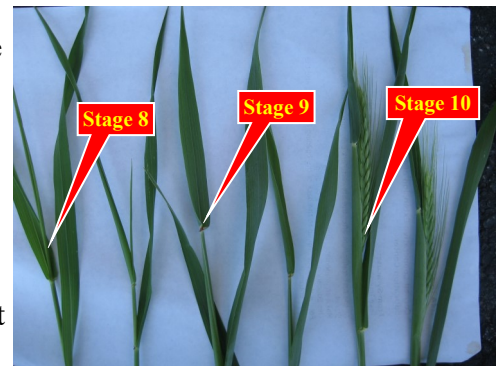
May 2017

**"It is the crops that feed the cows that make the milk which creates the money."**

## Delayed Cropping and Ticking Time Bomb

Over the last 15 years of my research, it has been consistent that winter forage is ready (stage 9 – flag leaf stage) a day or so before straight grass fields are at optimum. We mow the triticale and continue mowing the cool season grasses. Then we move to the grass alfalfa mixes and finally finish with the straight alfalfa. All high quality at harvest. That is the theory, now the weather.

Last year our eastern New York triticale was at stage 9 on May 13. As of May 1, we were running 13% ahead of last year in growing degree days and so the harvest was targeted to come slightly earlier. Then a major mass of cool to cold weather with tremendous down-pours rolled across the upper half of US from Minnesota all the way to New England dumping considerable moisture along the way.



Stage 9, flag leaf out, is optimum to harvest winter grains for forage

### Winter Forage Harvest

For the many new growers of winter forage (triticale), the key to quality is harvest timing. Stage 9 (see photo at right) where the flag leaf has just emerged, is the point where you have very high milk/ton feed value yet still gives excellent yields of 8—12 tons of silage/acre. If you miss and get early boot (stage 10), it is still very good, (NDFd 24-74, IVTD24-82). It will be 20-30% higher yield, and can be fed to the lower producers.

This year you have an additional factor in that if temperatures in your area drop below 40 degrees as it is slated to from Michigan to Maine, the maturity of the plant slows, giving you more time to harvest. Quality continues down but at a slower rate. So don't give up the ship.

The weather across the northeastern US will be opposite bookends. New York and New England will be cooler and wetter than normal while Minnesota and Wisconsin are predicted to be cool but drier. The cool temperatures with sun are perfect for producing much higher digestibility and high sugar levels so Minnesota wins. Unfortunately, for Michigan east, the weather is predicting extensive cloudy (and rain) which will only have 15-20% of normal sunlight. Photosynthesis is then lower than respiration and the crop goes into a negative energy balance – respiration uses more than photosynthesis produces. Not good for producing forage that makes milk. Hopefully you will get a day or two of sunshine before you must harvest so you have enough substrate for fermentation, and high energy for milk production.

Wide swath same day haylage needs sun for photosynthetic drying. In the sun the plant takes moisture and carbon dioxide to make sugars and oxygen, drying the plant faster than any machine manipulation can do. The cool, CLOUDY, and damp conditions coupled with some very high yields (thick swaths) will make it more of a challenge to harvest. To dry for

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silage you will need to wide swath (swath width greater than 80% of cutterbar) **and** use a tedder at least once. We suggest **increasing the length of cut to an inch**. Our field research has found this dramatically **reduces the leachate** from the silos and, like bmr products, gives **more effective rumen fiber** to get extent of digestion for this rapidly digestible product. As with bmr sorghums that are also wet and high sugar, adding a **good straight homolactic bacteria** type product to bring the pH down fast and actually limit off fermentation by wild bacteria. There are some specifically designed for these wet, high sugar forages that will **inhibit** the tendency to produce clostridia and butyric acid. This is not the L. buchneri types for these wet crops. L. buchneri is for drier forage. The only caution is that if we get a week of cloudy rainy weather and you mow on the first sunny day, the crop will probably NOT be high in sugar for rapid fermentation. You are on thin ice then and I don't know what will happen.



3 to 5 tons of dry matter winter forage (triticale) crops have been a challenge to dry for haylage in a day. A tedder, 2 hours after mowing, has been key to exposing lower layers to the sun.

### Ticking Time Bomb to a Critical Decision

The weather, rainfall, and the sun when it shows, are unrelentingly marching your cool season forages to the harvest window and then as we go past that point, falling quality, lower milk production and profitability.

**First cutting waits for no one.** Because real farmers grow corn that they can brag about, it becomes the be-all end all in the spring to the detriment of the haycrop. The fact of the matter is they often make a bass-ackwards management decision. The question this year is “Plant Corn or Harvest Haycrop”?? Over the past 40 years, every analysis we have made comes to the same conclusion: when the first cutting is ready, **STOP PLANTING CORN AND HARVEST HAYCROP.**

With this year's weather, actively growing sod fields and winter forages with their massive root system that pump out the water (60% less moisture under growing winter forage) and providing you with something to drive on; might be the only place you can go. The other factor is that cool season forages **lose** quality to the tune of **.55 pounds of milk/cow/day** from decreasing digestibility of the NDFd. **Later corn does NOT lose quality** and yields are only slightly reduced even planting the end of May or beginning of June. When we can plant corn there are a number of key steps mentioned in the last newsletter that can help. One pass minimum tillage or one pass deep zone tillage that is set for shallow depth allows you to slip in acreage on the few sunny days. Fall killed sods can be no till planted. The **biggest mistake is to mud in a crop** in a desperate attempt to “*plant something somewhere.*” I have seen many examples and they are all disasters. The yield loss in corn for being slightly late is far less than the 14 – 27% yield loss from soil compaction. There is even greater loss from planter compaction squishing the seed in instead of placing it in an optimum soil condition. Jim Capron's research with duals that allow you to get over soils that **should not be driven on** found a **30% yield loss**. Finally, where are we on length of corn season? For most, even later planted corn can compress the heat units to silage maturity. The concern is on farms who push the envelope for long season corn. The long term forecast is for a more normal to slightly warmer summer. Even if the El Nino re-appears, temperature above 85 is not going to help because the corn stops growing at that temperature. Corn of optimum maturity will make more milk than longer season corn that “*Might?*” make more tons of wet material. Depending on the individual farm, acres, and soil conditions we suggest you switch some of the longest out and plant the rest.

Sincerely,

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