

CROP ALERT

September 9, 2016

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Drought Related Corn Silage Harvest Considerations

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Regardless of the severity of the drought conditions in your area there are some important considerations to keep in mind going into corn harvest time. Many of these are applicable as standard best management practices.

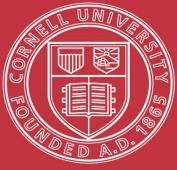
Forage Inventory

- ◆ You need to know where you are and what your usage rates will be. Accurately calculate your present inventory discounting for spoilage. <http://fyi.uwex.edu/forage/harvest/#sstorage>

Harvest Management

- ◆ Regardless of tonnage shortfalls you should strive to maintain quality over yield.
- ◆ Be careful of low cutting heights to increase dry matter yield. The potential for picking up dirt and increasing the forage ash content is there. This will decrease the nutrient value of the dry matter consumed and increase the risk of clostridium spore inoculation into the silage.
- ◆ High nitrate content is possible, but not often a practical concern. The highest levels occur when harvest is made within 3-4 days of significant rainfall after a long dry spell. Fermentation of at least three weeks will reduce nitrate levels 30-40%.
- ◆ Dry matter testing prior to corn harvest will be particularly helpful where the lack of an ear takes away the milk line estimator of moisture. Additionally, earless corn will appear drier than it really is. Stalk moisture is drawn down by kernel maturation. Shoot for 32-34% dry matter.
- ◆ Kernels on poor ear fill plants are still indicative of relative maturity and dry matter. Harvesting at 1/3 to 1/2 milk line is the thumb rule here.
- ◆ Chopping a sample to put in your Koster tester or microwave or for sending to the lab should be representative of the variety and field in question. Running a chopper through to open up a field and get a sample for testing only gives you a snapshot of that small area. Hand feeding numerous, random bundles might be more representative and efficient, but presents danger to the operator. Leaf and brush chippers are easy and safe alternatives.
- ◆ **REMEMBER:** Koster testers will overestimate the actual plant dry matter by 1-2 %.
- ◆ **NOTE:** NIR units may not be calibrated for the forage being tested this year. Drought stressed corn does not have the same physical structure or components that NIR machines are programmed to process. Check with your dealer for on-board chopper NIR considerations. This discrepancy goes for the commercial labs as well. Request wet chemistry to avoid skewed NIR results.
- ◆ Field to storage losses run 5-10% in a normal year. Drier material will more easily blow off in transit. That “settling” is tonnage loss not compaction! Consider tarping loads. Some farms have gone to hydraulic and electric roller tarp systems with great success.
- ◆ Nutrient loss and shrink in storage due to poor packing and/or fermentation will be greater with extremes in dry matter content. Cover your bunks ASAP! Oxygen barrier plastic has a large return on investment.





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- ◇ This will be a year to use inoculants! They can improve fermentation characteristics and reduce spoilage at feed out. This is particularly so with high sugar content corn silage with little to no ear where secondary fermentation is common. Natural lactobacillus levels may be very low this year.
- ◇ Don't forget about chop length. Using a Penn State shaker box during corn harvest is an excellent way to track chopper setting drift.
- ◇ Corn with little or no ear does not need to be processed.
- ◇ Segregate severely stressed corn from the less impacted fields if possible. <https://www.pioneer.com/home/site/us/silage-zone/library/management-drought-stressed-corn-silage/>

Feeding Considerations

- ◆ Drought stressed corn silage will generally run higher in protein, lower in starch (ear linked), higher in fiber digestibility and higher in sugars (from the leaves) depending on the degree of water deprivation.
- ◆ Ear molds and mycotoxins can be expected to be low except for where pest damage has occurred.
- ◆ Severely stressed corn silage without ears will have a feeding value of about two-thirds of normal corn. Even poor earing can raise that 85% of normal.
- ◆ Water is often overlooked as a contributor to minerals in the diet. Low water tables and heavy draw on wells can elevate mineral levels in hard water areas beyond normal seasonal fluctuations. Test your water!

Disaster Area declared in New York

Last month Agriculture Secretary Tom Vilsack designated 15 counties in New York as primary natural disaster areas due to the drought. The primary counties under this designation are Cayuga, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Schuyler, Seneca, Steuben, Tioga, Tompkins, Wyoming, and Yates. Nine counties are named as contiguous disaster counties under the Consolidated Farm and Rural Development Act. These counties are Allegany, Broome, Cattaraugus, Chautauqua, Cortland, Onondaga, Orleans, Oswego, Wayne.

These designations mean that farmers in those areas may be eligible for assistance, including emergency loans, from the United States Department of Agriculture Farm Service Agency. Additionally, State Agriculture Commissioner Richard A. Ball, state lawmakers and other farm leaders will be conducting on-site assessments of farms affected by the drought, while the state works closely with Cornell University expert hydrologists and climate professors to help understand and study the outlook for recovery.

Farmers in eligible counties have eight months from the date of a Secretarial disaster declaration to apply for emergency loans. Local FSA offices can provide affected farmers with further information. To find your local FSA office, visit www.fsa.usda.gov.

Working Through the Drought of 2016

The September issue of our newsletter focused on dealing with what Mother Nature has dealt us this growing season. We are posting it to provide the information in a timely manner. Click [here](#) to view the September issue of Ag Focus.