ADVANCED AG SYSTEMS'S

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

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A Wide Range of Corn Maturities Where are Yours?
New Cut Length for Corn

The range of weather conditions from wet to dry has left a wide range of corn maturities. Some sat for 3 weeks waiting for rain before growing. Others had adequate moisture and are maturing early. If you have been in the wetter area, start checking when the corn reaches ½ milk line. For the drier areas, check when 1/4 milk line. **THE ONLY TRUE INDICATOR OF WHEN TO CHOP IS TO MEASURE WHOLE PLANT MOISTURE**. Spending $350 on a forage moisture tester can give you a 60:1 return in one year. You pay for it getting one field correct moisture. You make even more by using it to check the forage as it comes out the silo into the ration. No farm is without a jackknife or pliers, no dairy should be without a forage tester. You can also use a microwave and dietetic scale. It takes about 15 – 20 minutes to run a sample. A third choice is a metal colander (used to strain pasta) and hot air popcorn popper plus dietetic scale. This is less expensive than a microwave and may be slightly faster.

When Should I Start Checking My Corn?

If your corn is currently at:

Full Dent Stage	1 week – 10 days away from ¼ milk line
Early Dent Stage	2 weeks to ¼ milk line
Late Milk Stage	2 ½ weeks to ¼ milk line *(doesn't squirt, but does not have much dent.)*
Early Milk Stage	3 weeks to ¼ milk line (*squirts when the kernel is pressed*.)
Blister Stage	25 days to ¼ milk line
Just tasseled	40 days minimum to ¼ milk line

Wait for a frost to dry it somewhat before chopping. Store in a separate pile and if possible, NOT fed to milk cows.

Setting the new length of cut

There has been a movement to long length of cut to increase the effective fiber in the diet, especially with processed corn. The shortage of effective fiber is not an issue with the corn or the processor but rather with the basic ration which is often deliberately limited in forage and heavy on grain with the impression that this will maximize milk. There is a major move by farms who are more interested in **maximizing farm profit** (how much stays in your pocket at the end of the year) compared to those who what bragging milk production regardless of the cost and the toll on the animals. **Farms in the Northeast who want to stay in business need to be over 60% forage in the diet.** An increasing number are at or above

70% forage in the diet (and over 85 lbs of milk/cow). The biggest savings are not just in grain purchase but in reduced vet bills and reduced number of heifers to carry because the milking cows are healthier and last longer in the herd (which also increases profitability and decreases cost).

This change has profound implications on the basic decisions on the farm, one of which is the length of cut for your forages, especially for corn silage. The **old concept** for choppers *with a processor was*: ¾ inch cut with *10 – 20% on top screen*. This system limits bunk capacity. A shorter cut packs tighter for greater silo capacity and improved fermentation. The older long cut limits dry matter intake. If you can't get the forage in you can't get the milk out. On high forage feeding farms a shorter cut increases dry matter intakes. Longer cut limits forage digestibility. Shorter cut exposes more to rumen bugs. High forage diet has still enough effective fiber to meet the animal's needs.

You can go to a shorter cut if you have enough forage for greater than 60% diet all year; you are already at greater than 60% in the diet; and if you have haylage in the diet for additional effective fiber. **Conversely chopping everything fine and then going to a low forage diet is prescription for disaster**. The new suggested length of cut is: Corn silage at 1/2 inch TLC: peNDF between 25-35% according to the Z-box, depending of starch level in the silage (Z box is a modified Penn State screen for forages - another low cost, critical feed back for making the best silage possible).

Are you getting your return from processing?

Just because a chopper has a processor, it doesn't mean the corn and cows benefit . Proper processing uses more fuel and slows the machine. Processors wear out much sooner than you think and are expensive to repair. As they wear they do less processing unless they are re-gapped. **How do you know?** ***Test your silage as you are chopping, before it goes into the silo*****

Processed corn had over 30% of the kernels not broken. The farmer had paid for processing, the cows only got partial benefit.

Take a double hand full of silage and drop it into a 5 gallon pail of water. Swish it around and dump the water and floating silage off. The kernels will be on the bottom. **If 95% ARE NOT NICKED OR CRUSHED, THE PROCESSER NEEDS TO BE RESET –you are not getting your money's worth.** This should be done as you go from field to field through harvest. To check your **non processed corn**- take the same 5 gallon pail test. About **30%** should be nicked or broken at the bottom of the bucket.

If you do not have a processor, see the October newsletter on how you can get equal or greater starch digestibility than processed corn without buying an expensive machine.

Sincerely,

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