



ADVANCED AG SYSTEMS'

Crop Soil News

<http://www.advancedagsys.com/>

April 2017

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

Advanced Ag Systems
Research, Education, Consulting

Dealing with a Wet Spring

What a difference a year makes. Last year we were eating dust, this year we are chasing ducks off the field. So the last two years together are average! The forecast is for May to be cooler and wetter than normal. What was best last year may not work for this year.

Tillage: don't till deep unless you are in excessively drained gravel or sand. You need to take a shovel and see how wet it is as you set tillage depth. It may look great from the tractor seat while you are putting a smeared, root limiting compacted layer underneath. Much of the one-pass deep zone tillage with rolling baskets this year will only go 6-8 inches deep as the deeper layers are too wet. The same with chisel plows. Dig a hole and look, and then only run them as deep as the soil is friable. This allows greater ground speed and more crumbling of the soil surface. I have seen fields of perfectly formed bricks from chisel plowing when it was too wet (photo at right). Even better would be to use no-till and skip the tillage this year. The soil in the top 3-4 inches still needs to be dry and friable enough to crumble and plant without side wall smear. If the soil structure has been destroyed, and there was no cover or winter forage, no-till might not be the best and some tillage may be necessary. In those cases, we have used 2 degree aeration tillage to increase surface permeability and then followed with a no-till corn planter. Keep the disks off the field in soils that are tending to above optimum moisture for tillage, as disks will put in a heck of yield limiting pan at $\frac{1}{4}$ the diameter of the disk (about 4 inches). It will look great until the first dry spell of mid summer. More farmers are changing their chisel plows into a one pass tillage system. One pass chisel, and leveler's with an "S" tine and drag fingers have worked very well. Others pull behind the chisel aeration units set at 5 degrees. For very restricted budgets there are telephone poles, steel beams, or logs with eyebolts and a chain. The concept is to do one pass tillage with a level crumbled seedbed behind for corn planting. One pass leaves a better soil for the corn to grow (no root restricting disk pan) and reduces tillage time nearly in half while cutting fuel use. You are getting only short windows this year, make the most of them.



Planter Tractor. We have found in years like this where you are pushing soil moisture to get the corn crop in, there has been tremendous yield reduction from planter tractors, especially duals that are not centered in the row but set close together. The corn in or bordering the tracks suffers stunting that can be seen all year. A better planter tractor would be a 4WD or front assist that has tires centered between the rows. This minimizes churning compaction, and keeps the tire weight away from the row itself plus minimizing the number of rows affected. A low pressure radial tire can have less compaction than even a track type tractor.

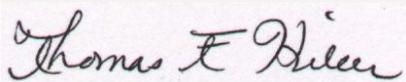
Corn Planter: On marginal conditions where you are not waiting for the soil to dry, only fill the fertilizer tanks or boxes half way to reduce the tremendous down pressure on the gauge wheels. Yes, you have to refill more frequently, but it may have significant impact on final yield in wet conditions. Watch the down pressure on the closing wheels. You planted last year in bone dry conditions. This year if you have too much down pressure on the rubber edged or cast iron wheels, they can make incredible yield limiting compaction right where the seed is located. Spiked wheels can also run too deep in wet conditions and actually flick out the seed you just planted. Finally, get out your jackknife and check the seed slot. If the sides of the slot are smeared like a trowel in concrete, it is too wet to plant. You will have higher yields waiting a day for the soil to improve. **A well growing late corn will yield more than an early planted stunted corn.** The compaction you put in this year will be limiting yields for many years after.

SUGGEST NO NITROGEN WITH HERBICIDE. You are just throwing away money as 95% of that early applied N could be gone by the time the corn is ready to use it in this year's wet weather. Nitrogen is expensive, get the most out of your purchase. Sidedress either 32% solution or treated dry urea when the corn is a foot tall. The 30 lbs of N in the band will more than carry the corn until then. If you want to do it yourself, a herbicide sprayer can easily be converted with drop hoses (or a T splitter) for each row to apply nitrogen.

Cover Crops. For those with extensive winter grain cover crops and fields too wet to get on, if you haven't killed them yet, **DON'T.** This is doing two things for you. **First,** it is removing a tremendous amount of water. Research has found that there is **60% less water under a growing winter grain crop** than under bare soil. Your **driest fields** are where this crop is growing. **Second,** we don't know how bad the season is going to be. Add some nitrogen and sulfur now and as soon as winter rye or triticale reach flag leaf stage (mid May in central NY) the forage will have more milk/ton than the excellent BMR corn. Taking advantage of the weather breaks to mow (wide swath **and ted** for rapid, same day haylage) will give you tons of some very high forage quality. It also removes the biomass to allow you to spread manure and minimum till before planting. Caution: there is allelopathic effect from all winter grains, that reduces stand and plant growth of the corn but excess rain (over 2 inches in our experience) will minimize this issue. We know tillage both minimum, and zone with rolling baskets will eliminate allelopathy in all seasons. If you are trying to get in seedings, no tilling alfalfa into winter forage stubble after harvest in May has worked very well for us. (<http://advancedagsys.com/january-2014-better-new-seedings/>)

What if I am not finished planting corn when the winter forage/alfalfa is ready? As it turns warmer, the hay crop harvest will advance on to the incomplete corn silage planting. Don't lose both crops. Corn silage yields drop off slowly as you go through May into June. Corn planted as late as the beginning of June will yield 85% of a normal crop. BMR forage sorghum can give a full crop at that planting date. The **quality of the corn silage**, especially if you adjust for a shorter season, **can be just as good as full season crop** corn silage. Delayed corn often decreases its maturity and can make up some of the season. The **quality of later cut hay crop does NOT.** The yield of hay crop increasingly has the digestibility of fire wood. It will be over mature, low palatability, and unprofitable to make milk on. **Each DAY you delay hay harvest increases NDF ½ to one point which removes \$4,000 of profit.** In any year, **stop corn planting in order to harvest high quality, milk making forage. It will not result in much of a yield decrease for corn silage. It will mean the milk you make, can have a chance to be profitable because of early haylage harvest.** The later corn may actually do better planted into non compacted properly worked soil.

Sincerely,



Thomas Kilcer,
Certified Crop Advisor

172 Sunnyside Rd
Kinderhook, NY
12106

Tel: 518-421-2132

tfk1@cornell.edu

**The Helping
Hand
to Better
Agriculture**

