



ADVANCED AG SYSTEMS'

Crop Soil News

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

Advanced Ag Systems
Research, Education, Consulting

Round Two From the Wet Fall: Short on Forage

The horrible weather last fall is having a lasting effect. A number of farms did not get their last cutting of haylage. Even worse, corn planted for silage was left in the field until the ground froze and then combined. Both of these factors are leaving farms this spring short of forage. Some are only partly short, while others are seriously short on forage and may have to cull animal to meet feed needs. What are the fastest crops to grow in 2019?

The earliest crop will be winter forage. Fertilized as we discussed in the March issue, [March 2019 Newsletter](#), and harvested at flag leaf stage, 2 – 4+ tons of dry matter/acre can be added to the feed supply before the leaves are even on the trees. Unfortunately, many winter forage acres were not been able to be planted or went in very late due to the wet weather and the corn silage still on the field. Later planted will still give you a crop but yields will be down.

Right after winter forage harvest (literally within a day or two) comes the cool season grasses. Fertilized with nitrogen and sulfur, they will take advantage of the cool moist conditions and can produce high yields of quality forage that can sustain top milk production. Most farms do not harvest grasses in time. Dr. Cherney's work has found that stands of nearly all grass will be ready to harvest when your alfalfa is only 13 inches tall. This is when grass is at an optimum stage for top dairy forage. The timing is often a couple of weeks ahead of the alfalfa so you need to be ready. South facing/ well drained fields will be ready before north facing /wetter field. You can delay harvest for higher yields but it come at the price of forage quality and milk/ton. Immediately re-topdress after first cutting to take advantage of the cool spring/early summer weather and get another harvest of milk quality forage in June before the hot weather hits. For rapid regrowth, each cutting of grass needs the cutter bar set at 4 inches. Cutting closer than that will devastate the next cutting grass stand and yield. If summer is cool and wet, the above management steps can continue and give you a tremendous amount of forage from the grass fields. One farm I worked with had nearly all grass fields. With a cool wet summer and the management steps we listed, they were only able to harvest half of their acres but got their full feed supply by timely cutting and repeat fertilization. Don't underestimate or over look grass.

Legume seedings with forage oats are the next yield boost. This is not always the preferred method for seedings, but seeding with an oat nurse crop will give you several tons/acre of high quality forage if cut at boot stage in late June. In this case, we suggest a forage type oats for maximum yield potential. I would suggest setting the cutter bar height at 4 inches to leave as many leaves and regrowth points on the alfalfa /clover under-crop. What you potentially lose in oat forage you gain in new seeding growth.

A number of farms are thinking of planting bmr sorghum sudan, or sudangrass as emergency forage for an early harvest. We have done extensive research over the past several years and although I am very positive on these crops and think they have a role on today's farm, **I do NOT suggest you go this direction.** The main reason is that you lose one to two months of early growing season as all sorghum species need WARM soil with increasing soil

temperatures. For the Albany, NY region we have had to delay planting until the 15 of June on some years and the first of June on all years. Ignore this and the crop will not emerge or grow. This eliminates the growing season for the second half of April and all of May and possibly the first two weeks of June. In addition, for most people, the change and the detailed management for success with a wet forage, plus the lack of proper planting/harvesting equipment, and dealing with a new crop that you have limited experience with, is not an additional risk you should throw on top of an already tough year in a horrible economic climate. You need odds of success, not disaster.

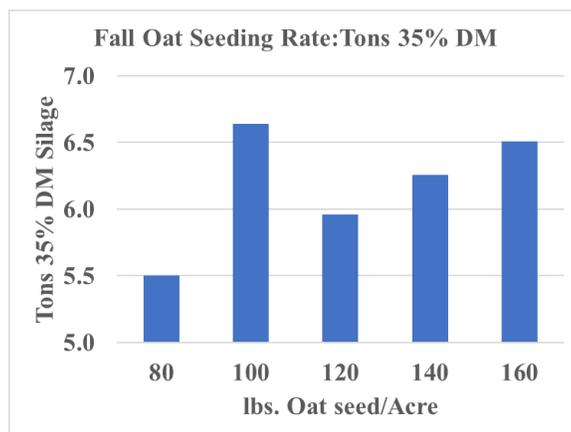
Most Practical Option: For most farms, a very early planting of a short season corn will be the least risk option. Farmers know how to grow corn. Corn can grow at soil temperature of 55 F. so you can maximize the season. No-till would be even better because you don't have to wait for the whole soil profile to dry, just the top 4 – 5 inches. Based on past research I have done using this process, the suggestion is to boost the population. Early corn varieties are developed by shortening the vegetative stage. This tends to produce a shorter stalk. Shorter stalks mean less yield. Having more stalks/acre (more seeds planted/acre) will make up for this and maintain yield and standability. We have planted 82 day corn the end of April at Albany, NY and had mature 18 tons/acre corn silage by the first of August.

Triple Crop Treat: The above short season corn can be immediately followed by a manure that is immediately incorporated. Then plant 100 lbs. oats (grain type - not forage oats) and 80 lbs of triticale /acre. The oats will be harvested at boot stage the end of September. If you mow it correctly – cutter bar height at 4 inches, the triticale will rapidly regrow and give you an additional harvest next spring. Mow shorter than that and you will have a bare field with no winter forage. Thus, from the same acre you get a corn silage crop, an oat forage crop, and a winter forage crop the next spring. Yes, you can grow a full season corn but you will not have a corn silage harvest adding to your forage supply the beginning of August.

If you don't want the winter forage advantage you can plant just oats. In our trial, just oats planted in early August, with oat seeding rates of 80, 100, 120, 140, 160 lbs./a did not show any significant increase in yield above the 100 lbs./acre rate (see graph at right). If you are taking the oats at headed stage for lower production animals or heifers, then you may need to watch the manure application rates to prevent lodging. For our trial with winter triticale where we took the oats at boot stage, we applied 11,000 gal/acre of manure and immediately incorporated it. I have seen samples harvested on time with wide swath same day haylage saving the sugars, and the test showed protein was 20.4%, the NEL was .74, and the sugars were 15.7%. **Using a homolactic bacteria inoculant** our research has found that with these high sugar levels you can get complete fermentation without butyric issues on this wet forage.



We have planted no-till **short season corn** at over 35,000 and up to 40,000 with no lodging issues. This will depend somewhat on the variety chosen. In our trial we did not see much decrease in starch as we increased the population 50%. I would hesitate to go over 40,000 due to the increased seed cost and the return or lack thereof. At this level and below the population did not affect the NDFd30 in this study.



Sincerely,

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