

April 12, 2019

HAVING A BACKUP PLAN WITH N APPLICATIONS

I looked at the weather data from the Plymouth weather station this week. For the window of time from April 4 to April 10 soil temperature has averaged above 50 degrees Fahrenheit for seven days and are now in the mid 50's but dipped down to upper 40's on Thursday and Friday April 11 and 12. That's not surprising as high air temperatures have been in the 70's and lows in the 40's then the colder weather. The soil temperature readings are totally opposite of last year when the same soil temperatures were in the 30's. This is a 4 inch depth soil temperature reading on bare soil.

There has been some anxiety around this planting season as the normal anhydrous preplant application window for corn has narrowed with wet field conditions and fields needing repairs along the Big Blue River basin. Waiting for the soil to dry is really a hard thing to do, but yet has many benefits. A field can be messed up for an entire growing season with mudding in fertilizer, sidewall compaction with the planter and soil compaction. Worse yet, tilling soil that is too wet has lasting effects. The same concerns are there for planting too shallow. The economics of the current crop prices further indicate we cannot afford those mistakes.

In season fertilizer applications on corn are a very efficient way to apply nitrogen. Corn requires very little nitrogen at planting time and emergence, but takes up half its N supply between eight leaf stage and tassel, a period that may comprise only 30 days. Providing adequate N, often by knee high, before this period, is a key goal of N management. Having a backup plan in a year like this year to supply in-season nitrogen could be a good strategy. If weather interferes with the originally planned preplant application, a quickly implemented backup plan can help.

Sidedress application can begin right after planting and until corn is too tall. Considering sidedress application helps widen the window of ammonia application and will help lessen short-term product supply issues.

Did you know that a high capacity injector pump on a pivot can supply 50-60 pounds of nitrogen with a quarter inch of water safely on corn with one application? A soil at field capacity will still infiltrate a quarter inch of irrigation water. Split applications of nitrogen reduces risks with corn injury when the time window is shortened between preplant anhydrous applications and corn planting.

Cattle Condition: We are encouraging any livestock producers to contact their FSA office by April 29 to report livestock death losses in excess of normal mortality due to adverse weather events this year.

This winter, the extended period of wet on their hair coats with combination of cold weather caused issues. Then blizzard conditions, flooding and mud. Under these conditions, cattle have to use more energy to maintain their body temperature and creates a situation where they use more energy to maintain their body temperature. It can create a situation where the cattle cannot eat enough to meet their energy requirements. When this occurs, they begin to use body fat reserves. If this happens for an extended period of time, those reserves can become depleted and the animal will not be able to maintain body temperature and will die.



Research has shown, the reproductive rate of the cowherd is one of the most important factors affecting cow/calf producers' profitability. A cow's reproductive potential is closely related to her body condition at calving.

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