ProAg Service & Insurance Spring Update

April 2018

Its mid-April and parts of Minnesota just received two feet of snow. Safe to say it will not be an early spring. Looks like we have a chance to do a little more ice fishing before we hit the field. With the later than normal spring we start getting more questions about prevent plant and what your per acre guarantees are. We've included a little more in-depth info on PP in this newsletter. Please don't hesitate to call with specific questions for your farm, we would be happy to visit with you. If you're a corn grower you might want to check out the article on the Syngenta Lawsuit. Looks like it is moving along with payouts starting next spring. There will be a way to join the class action suit if you are not already signed up with a law firm.

This later spring may have some of you questioning your plans to plant more wheat in 2018. Jochum Wiersma has provided an article on the yield effects of planting later than normal.

Please don't hesitate to give Dan, Mike, Jody, Aaron, Pam or Dave a call if you have any questions at all. We appreciate your business and trust in us.

Wheat...When is late too late? By Jochum Wiersma

It doesn't look like anyone will be doing any fieldwork in Minnesota anytime soon. The question when it will be too late to seed small grains, therefore, is becoming a bit more urgent. Wheat, barley, and oats are cool-season annuals and are most productive when they grow and develop during cool weather. The yield potential of these cereals is largely determined by the 6 leaf stage. Cool temperatures during this period are particularly important for the development of a high yield potential. For example, the number of tillers that ultimately produce grain at harvest declines as planting is delayed (Figure 1). The number of spikelets per spike is determined during the 4 to 5.5 leaf stage (Figure 2). Spikelet numbers are negatively correlated with temperature; spikelet numbers are greater when temperatures during the 4-5.5 leaf stages are cool.

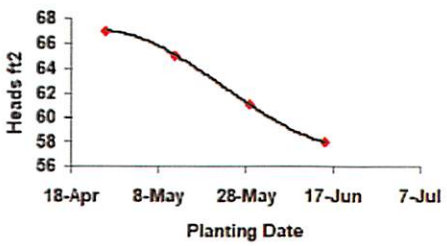

Figure 1

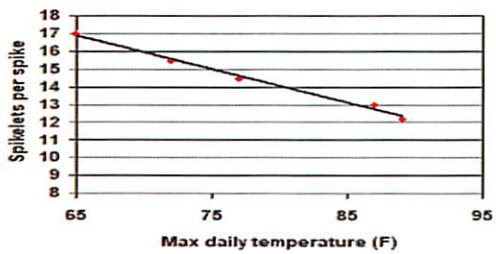

Figure 2

Because of the expectation that average temperatures will be higher as we plant later, development of the crop will speed up too. The number of heat units required for a plant to move to the next phase of development will accumulate faster. This forces development along faster and causes the plant to have less time to grow. Plants end up with fewer tillers, smaller heads, and fewer and smaller kernels per head, cutting into our yields. To improve the odds of high grain yields is to ensure that the tillering and head initiation phases occur during relatively cool temperatures is by planting early. Early planting is key to raise wheat, barley, and oats in Minnesota successfully (see the table below)

The optimum and last recommended seeding dates for small grains in Minnesota.

Minnesota	Optimum	Last Planting Date:
South of US Hwy 12	1st week of April	1st week of May
South of MN Hwy. 210	2nd week of April	2nd week of May
South of US Hwy. 10	3rd week of April	3rd week of May
South of US Hwy. 2	4th week of April	4th week of May
South of Canadian Border	1st week of May	1st week of June

Research has shown that, on average, yields decreased 1% per day when planting is delayed past the optimum planting date. Planting after the last possible date is not recommended because of the odds that grain yield and quality (test weight) will be dramatically reduced due to heat stress. You can partially offset this yield loss by increasing the seeding rate and ensuring that you have more main stems per unit area. The recommendation is to increase the seeding rate by 1 percent for every day after the optimum planting window. The last possible date for planting is not chiseled in stone. The odds of a higher grain yield with excellent test weight are less in our favor with every day seeding is delayed past our optimum planting windows simply because of the expected temperatures later in the growing season.