Crop Weather
As I am sure you are well aware, this has been a tough spring. The University of Minnesota Southwest Research and Outreach Center (SWROC), Lamberton, MN is in one of the fortunate areas of Minnesota. We received a few inches of snow the past week but nothing like the huge amounts that fell to the east.

While all fields are not yet fit, by picking and choosing, some crop has gone in. Hopefully we can get a break in the rainfall and a good amount of corn can get in the ground this week or next. When you are considering which fields to plant, don’t forget that it is not too early to plant soybeans! Unless you are really pushing the maturity adapted for your area (many producers tend to do the opposite) we still have some time. We may yet be grateful for this spring’s moisture as the 2013 season unfolds.

Some of you like to calculate degree-days to predict crop and pest stages. The Minnesota Climatology Working Group website allows you to calculate these for multiple locations in Minnesota. [http://climate.umn.edu/cropddgen/](http://climate.umn.edu/cropddgen/). You can use the standard 50/86 corn soybean degree day model or any other base temperature you wish. Any "m" in the output indicates missing temperature data. From April 15th – May 1, we are well behind in degree day accumulations. But then...you might have already guessed that.

Another site that provides graphic degree-day models across Minnesota and Wisconsin is housed at the University of Wisconsin at: [http://www.soils.wisc.edu/uwex_agwx/thermal_models](http://www.soils.wisc.edu/uwex_agwx/thermal_models). In addition to corn models for several insect pests (e.g. seedcorn maggot, corn borer, stalk borer and alfalfa weevil) are updated. They are all well behind schedule.
Degree-days and other weather data can be found at the SWROC website: http://swroc.cfans.umn.edu/WeatherInformation/index.htm.

**Winter mortality of alfalfa and winter wheat**
If you care about your alfalfa crop and haven’t already done so you might want to check your fields. Damage is area and sometimes field specific. As typical, those areas that experienced freezing and thawing of ponded snowmelt suffered. Some higher ground has problems as well. Remember, these crops went into winter under moisture stress and there was little re-growth in many drought stressed alfalfa fields. Additionally, it is possible that some early shoot development may have been injured by temperatures below 25° F in April.

When evaluating stands remember that the cold spring has delayed growth. Stand evaluations are based on number of stems / ft². Crowns producing few shoots are injured or stressed. Typically stands with 40 stems / ft² should be considered for replacement but hay shortages might delay replacement of some weaker stands. I’ll try to get some reasonably accurate assessments of alfalfa at the SWROC this week. My initial impression is that it is not going to be pretty..

There should be information additional to the recent crop news article produced from the University of Minnesota Forage Team.

**Aster leafhopper**
They are here, or at least the first wave is. On 5/06/13, very low numbers (1 to 4 aster leafhopper adults per 50 sweeps) were observed in narrow strips of SWROC winter rye. These numbers are very low. The winter rye was functioning as a trap crop and concentrating leafhoppers. Aster leafhoppers were not found in alfalfa, winter wheat or nearby grasses.

**Alfalfa insects**
Just like the alfalfa, alfalfa weevil development is behind that of a typical year. Alfalfa weevil damage can be more severe in thin or stressed stands.

I have not seen any potato leafhoppers in alfalfa sweeps but assume that they will arrive at some point. New seedling alfalfa is particularly vulnerable to potato leafhopper damage.

**Soybean aphid**
Over the weekend the buckthorn buds began to open. Research conducted in Ontario linked the timing of soybean aphid egg hatch with buckthorn bud break. In 2012, buckthorn (and everything else) leafed out very early. Soybean aphids would have been exposed to two mid-April nights in the teens. This may have been partially responsible for last year’s low aphid populations.
**Black cutworm**
The pheromone trapping network managed to pick up significant captures last week. These data will be available shortly.

**Free advice**
**They all can’t all be right.** There is no hard evidence that fertilizers and pesticides have any magical properties. Believe me; I've spent a lot of time and effort looking. Insects don't eat more, fungi don't decay more and a plant doesn't develop an increased appetite for micronutrients just because crop or land prices are high.

Be wary of blanket and widespread advice on how to manage crops, particularly crop pests. Each field is a unique situation. One size fits all management programs should make you suspicious. Yes, there are some general principles that usually hold true: soils in low-testing soils often respond to fertilizer, economic threshold based insecticide treatments pay and pre-emerge herbicides help manage risk. On the other hand, every corn field needing a corn rootworm insecticide, every soybean field needing a seed applied insecticide and the same cutting schedule for every alfalfa field are easy recommendations to make but they’re unlikely to be the best economic decision for even a small majority of fields.

The best recommendations for the producer’s bottom line are based on sound research, agronomic experience and field specific historical and in-season observations of yield and biotic or abiotic problems. That means the producer should be involved in the decision process on fields.

Many rely on crop production advice from ag professionals. Producers should select their advisors carefully and trust them. A second opinion is often a good idea. However, there are few things more frustrating to an advisor than having an intricately planned recommendation changed last minute at the point of sale. In addition to being confusing for the producer, herbicide tolerant crops and pesticide resistance are making last minute changes increasingly perilous from an economic perspective.

**We’re not in Kansas anymore.** Producers and their advisors intuitively understand the problems with geographic scale. Yet, they often get on the internet and proceed to assume we are just like Ohio or Missouri. Crop growth and yield loss for a given pest may be different in other parts of the country. The range and magnitude of the recent early May snow within Minnesota should help illustrate the problems with adapting internet based pest management information from nearby much less distant localities.

Finding your location on a map of an insect or disease is fun and easy to do. Pest alerts may provide a general “heads up” for when and where to look but they are counterproductive when used to make a management decision for an individual field. Yes, it happens.

Finally, producers and their advisors alike need to acknowledge a particular segment of the agriculturalist population. This segment considers the creating and spreading
rumors of impending pest disasters and miraculously high yields as great sport. In addition to the internet, they are at their most effective when encountered at rural cafes and watering holes.

The comments above were not intended as platitudes. They reflect my personal crop management philosophy. Your philosophy may differ. We all need to realize that, voluntarily reading the above advice cost you a bit of time but exactly zero point zero inflation adjusted United States dollars.

Happy trails,

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