



## WALKING FIELDS

### HARVEST WEATHER UPDATE

After a nice stretch of weather to begin the harvest season, Mother Nature has flexed her muscle and slowed progress in many areas. October brought below average temperatures for much of the month which slowed grain drying in the field. In Waupaca, Wisconsin heat units stopped accumulating around October 11<sup>th</sup>, frost warnings and cold nights followed closely after. There was widespread large snowfall throughout northern Wisconsin and Minnesota that totaled 6-8 inches in some areas. Other areas got smaller amounts that quickly melted because of warm soil temperatures. Heavy rainfall of more than two inches also slowed harvest towards the end of the month with a heavy band stretching from Grant county in Southwestern Wisconsin to Green Bay. This moisture did not change the soil moisture report much from before. 76% of topsoil and 77% of subsoil is rated as having adequate moisture and only 16% and 13% are said to have a surplus of moisture. Fall field work and harvest has been moving along at a steady pace despite the weather. Corn harvest in Wisconsin is at 40% complete, 3 weeks ahead of 2019 and 5 days ahead of the 5-year average. Soybeans are scarce with 85% of acres harvested which is almost two weeks ahead of the 30-year average. Before much of the rain there was some opportunity for fall tillage work to be completed. About 40% of much needed fall tillage is complete. Harvest progress is marching along very nicely for the end of October. Stay safe and be aware during this busy time of the season.

## FALL SOIL SAMPLING

### SUCCESSFUL SOIL SAMPLING METHODS

Fall is an ideal time to take soil samples, soil moisture is more manageable than in the Spring and growers have time to create and implement plans to correct deficiencies. Collecting representative cores to make a sample is very important. The small sample that is collected will represent an area of the field and help make recommendations.

Start by taking soil samples every 2-4 years or once a crop rotation. Collect the samples before any fertilizer is applied in the fall. Ideally, all fields being sampled will have been in the same crop that growing season to reduce variability in crop removal of nutrients. There are multiple sampling methods that can be used. Whole field sampling is when you collect a number of samples to represent the whole field. This does a poor job showing the variability throughout the field. Management zone sampling is where the field is separated into similar management zones based on field history, soil types, yield maps and/or topography, then samples are collected from each management zone. Grid Sampling is where the field is broken into square grids of 1 to 10-acre segments and a sample represents each grid. Some producers will take a grid sample from one single GPS point so they can measure the progress of fertilizer applications at a repeatable point year after year.

No matter the sampling method used it is encouraged that each sample is at least 10-15 cores and that these cores accurately represent the area being sampled. When going to the field it is a good idea to have a map of the area to be sampled and a plan for how to collect the samples. There are programs and mobile apps that can be used to set up grid points for grid sampling. Each core should be taken to a six-inch depth and at a 90° angle with the soil surface. Thoroughly mix the cores in a plastic bucket and pour the soil into a labeled sample bag. If a core looks different or is drastically different from the rest in an area, discard the odd core and take another.

Submit your samples to a certified lab. Be sure to know what results each testing package includes. We want to be able to use the results to make fertilizer decisions – particularly phosphorus, potassium and lime (pH). Organic Matter and Cation Exchange Capacity (CEC) help show the potential water and nutrient holding ability of the soil. Calcium and Magnesium testing can be beneficial in diagnosing drainage issues. Base Saturation can show a more complete picture of the ratio of nutrients that are in the soil.

In winter editions of this newsletter we will look at how to interpret and make decisions from soil test results.



# COMBINE CHECKS

## CHECKING FOR HARVEST LOSS

It does not take much to lose a couple bushels of yield when harvesting. **Two kernels of corn per square foot or four soybeans per square foot** is all it takes to lose a bushel of production per acre. There can be harvest loss before the machine even gets into the field. Check for lodged plants, dropped ears and opened pods ahead of the combine. In soybeans around 90% of harvest loss comes at the header, this includes pods below the height of the cutter bar that are not harvested, stripping pods from the stem and shatter from augers and reels. Header loss is not as extreme in corn but too fast of header speed and improper deck plate clearances cause the biggest losses. To check header loss, stop the machine and count kernels or beans in an area the header has covered but the combine has not. Threshing losses are most commonly identified as cobs with kernels still attached or full pods behind the combine. Sieve and fan adjustments can be adjusted to limit foreign material in the grain tank but incorrect settings can cause grain to be lost out the back of the machine. To determine threshing losses, walk behind the combine in a harvested area checking under, in and on top of residue and count how many kernels or beans there are in a square foot.



## DICAMBA LABEL UPDATE

### OVER-THE-TOP APPLICATIONS OF APPROVED DICAMBA

On October 27<sup>th</sup> the Environmental Protection Agency announced that it will approve dicamba formulations for over-the-top use in 2021 through 2026. This refers to approved dicamba products, such as Engenia, FeXapan, Tavium and XtendiMax, being applied in crop to RoundUp Ready 2 Xtend and XtendFlex traited soybeans. The label was up for reassessment at the end of 2020 but a ruling by the Ninth Circuit Court of Appeals in early June vacated the current label. The new label has some notable changes, including; a federal spray cut-off date of June 30<sup>th</sup> rather than the previous 45 days post planting; an increase in required border set backs when a susceptible crop is downwind; and some other changes to make all product labels more consistent and easier to use. Individual state labels have not yet been secured but normally follow shortly after a federal label approval. More information will follow once more details of the label are published. Please recognize that the approved dicamba formulations are only a piece of a solid glyphosate resistant weed management program. Using multiple modes of action will help gain control over problem weeds and preserve our technologies.

## GETTING SQUEEZED

### MANAGING COMPACTION DURING HARVEST

Soil compaction caused by wheel traffic can account for 10-20% yield loss. In fully saturated soils, moisture can act as a lubricant when heavy loads collapse the soil structure. This will cause reduced water infiltration and root development and ultimately crop yields. Recent wet weather may make it difficult to avoid driving across saturated soils during harvest. These few things can help avoid serious compaction. Designate specific travel paths. Up to 80% of soil compaction is done in the first wheel pass. Localize the damage to one area. Do not run grain carts and combines at full loaded capacity. Harvest around the wettest areas to avoid major soil structure damage and machinery damages. Use appropriate tire sizes and air pressure to handle loads and provide the most surface area in contact with soil. When using tillage to correct compaction ensure soil is dry and fit to be tilled. No-till and minimal tillage can also help prevent compaction and destruction of soil structure.

**FOLLOW & SHARE OUR YOUTUBE CHANNEL – [LEGACY SEEDS AGRONOMY](#)**