Time for Nitrogen on Wheat!

Many producers have not yet applied any N on their wheat this year. This could have been due to wet soil conditions or they had too many plants/tillers already present in the field. Many of these fields are starting to look off-color with a yellowish tinge, Figure 1. These plants are hungry and it is time for some nitrogen. Part of the issue is that the cooler spring temperatures have delayed the normal mineralization of soil organic matter that usually is starting by this point in the season. If you were waiting for Feekes 6 (jointing) for that one application of N, that time is here for most of the early planted fields, Figure 2. To determine if your field is at Feekes 6, find the main stem of the wheat plant and peel off the tillers and leaf sheaths so that the stem is smooth. Feel for a swollen bump on the lower quarter of the stem. If this node is present, you are at Feekes 6. This is a critical stage as the head is developing its overall yield potential right now. We do not want these plants to be stressed and reduce that yield potential. Tank mixing nitrogen with herbicide will have an increased chance of “burning” the wheat, especially on the hot days ahead of us this next week.

Herbicides and Fungicides on Wheat

If you haven’t already sprayed for weeds, it is best to have it done before the Feekes 6 stage. We have seen many of the winter annuals in full flower. We also had our first report of powdery mildew (PM) on Otsego this week in Livingston & Monroe Counties, Figure 1. Time to get out there and scout! If PM is present tank mix
propiconazole (e.g. *Tilt*) with your herbicide if needed. At this point do not use 2,4-D to control weeds in small grains as it has a higher chance of causing small grains to “get caught in the boot stage” where the flag leaf does not completely unfurl from the grain head.

### Timing First Forage Harvests

Winter triticale forage fields currently have a wide range of maturity in the region. Some later planted fields are still short (6-8 inches) and at the Feekes 4.0 (beginning stem elongation), most are around Feekes 5.0 (stems elongating) at 8-10 inches tall, and some earlier planted fields are at Feekes 6.0 (one node at the bottom of stems) with heights over 10 inches. Heat drives small grain maturity so this next week with highs above 70°F will quickly move the maturity along in these fields to the one and two node stages (Feekes 6.0 & 7.0). However the temperatures are forecasted to fall back in the 60s for highs the following week and will probably slow down growth so harvest will likely occur sometime between May 20-30th. Be sure to wait until the flag leaf fully emerges (Feekes 9.0) to begin harvesting these fields. Waiting an extra 5-7 days to get the flag leaf completely out will increase yields by ~30% with little change in quality. Once the seed head begins to emerge forage quality will decline.

Haylage fields are starting to wake up and grow, but harvest will likely be delayed until close to the end of this month for many folks in the region. As grass percentage increases in a haylage stand, the average plant height for optimal harvest timing decreases. The mostly grass haylage fields should be harvested before the boot stage (seed head emerging) and will be shorter (12-18 inches), mixed stands of 50% grass/50% alfalfa will be around 20-24 inches tall when ready for first harvest, and mostly alfalfa stands will be around 30 inches tall. Cornell professor Jerry Cherney has some additional tools online to help time first haylage harvest.

### Winterkill in Small Grains

A number of winter small grain fields have suffered partial or complete stand loss this year beyond just the low, wet areas in the field, *Figure 3*. This was due to the harsher weather conditions, widespread occurrence of snow mold, and varietal susceptibility. If your small grain fields have a lot of patchy dead spots where the plants look like they just melted away it is probably snow mold. Malting barley has been hit especially hard. Planting of spring malting barley and other spring small grains has been severely delayed and will have lower yields as a result this year. The final spring planting date is May 10th to still be covered by crop insurance. Anything spring small grain put in the ground after next week will probably not amount to much. In those situations switching to corn or soybeans will be a better bet.

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**Figure 3: Partially Winterkilled Malting Barley**

*Source: Bill Verbeten*