



**Cornell University**  
Cooperative Extension  
Northwest New York Dairy, Livestock & Field Crops Team

## **CROP ALERT**

**April 17, 2014**

*Bill Verbeten and Mike Stanyard, Regional Agronomists, Cornell Cooperative Extension*

### **Tiller Counts in Wheat.**

Some nitrogen was sprayed on wheat on gravel soils this week but these fields were few and far between. We talked about tiller number and nitrogen rates last week. Since most fields can't get any N applied it's time to get a little muddy and get some accurate tiller counts when the weather finally breaks if this hasn't already been done. Wheat looked great in western Monroe, Orleans, & Genesee Counties this week. Everything greening up and very little winterkill except in some wet holes. Tiller counts exceeded 1200/sq yd. in those fields planted at the end of September. Higher plant populations averaged 4 tillers/plant while lower plant populations averaged 7 tillers per plant with some plants having 9 tillers, *Figure 1*. The quickest way to get a tiller estimate is to dig up and count the number of plants in three foot of row (yard). Multiply that number by 4.8 to get the number of plants/square yard (assumes a 7.5" row width). Dig up ten plants in that square yard, count the number of tillers on all ten plants, and divide by ten to get an average per plant. Multiply the number of plants/sq. yd. times the average tillers per plant to get the number of tillers per sq. yd. With these higher tiller counts, it would be best to get the N on during stem elongation when the first node is above ground. We definitely do not need any more tillers!

*Figure 1: Nine Tiller Wheat Plant*



*Source: Mike Stanyard*

### **Delayed Spring Small Grain Planting**

Seeding spring small grains (oats, barley, triticale, & wheat) after the 15th of April usually results in a yield loss of 0.5-1 bu/acre per day. This year delayed planting is a necessity given the cold and wet spring weather. Try to get these crops in as soon as field conditions allow. Once we get into May it may be better to switch over to corn or soybeans, especially if the weather turns hot and dry a month from now.

### **Potassium on Small Grains**

As field conditions improve consider putting some potassium fertilizer on the wheat, triticale, barley, rye, oat, and spelt fields in addition to the remaining nitrogen. These crops remove just as much potassium as nitrogen and it's important to apply what the soil can't supply. Improved yields, grain fill, disease & insect resistance, root growth, increased grains per head, increased grain size, and better response to high nitrogen rates are possible with more potassium. Applying 50 -60 lb./acre K<sub>2</sub>O should be enough in most situations if a recent soil test is not available.

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