



CROP ALERT

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Early Wheat Management Tips

It is time to take care of your wheat! It looks like it will be an early spring if this mild weather continues. As I write this, I am staring out my window on March 9 and it is 70 degrees! There was a short window for frost seeding. If it didn't get done by March 4th it probably didn't. Many of the earlier planted fields will be greened up nicely as you read this. See the reminders below on tiller counting, fertility, herbicides, and fungicides.

Nitrogen. In past articles I have discussed counting the number of tillers to determine if you should put all of your nitrogen up front, split it into two applications, or put it all on at a second application at Stage 6 (jointing). With the lack of snow this March I'm sure many of you have already assessed how many plants and tillers you have per square yard. If you haven't and need a refresher course, see my short video on how to do so, <https://vimeo.com/124455368>.



See chart as example of tiller number and N timing and amounts. If your plant/tiller counts are low, be prepared to get more N

Tiller Numbers (per sq. yard)	Nitrogen Recommendation
< 300	up to 60 units of N at green up, rest applied at GS 5-6
450-600	Up to 45 units of N at green up, rest applied at GS 5-6
>700	No N at green up, all N applied at GS 5-6

on early as wheat plants green up fast and need to be fed. This N is utilized to increase vegetative production and promote additional tillers. If tiller counts are in the middle, then get some N on early and the remainder on at jointing. If tiller counts are high, hold off on applying N at green-up and apply it all at jointing. This later N application timing should coincide with stem elongation which means nitrogen

is going towards increasing the number of seeds per head and seed size, not additional tillers. However, I will throw in a word of caution here. Last year was a wet year and those who held off for just one later application of N could not get in the field when they needed to and the wheat turned off-color. This is definitely not what we want at this crucial growth stage and yield potential was lost. I now have some growers who are going to apply 20 pounds of N early even if their tiller count is high, to protect against the potential for a delayed second application.

Weeds. We continue to encourage the earliest planted fields to be sprayed for winter annual weeds (purple deadnettle, chickweed, chamomile) in late fall. Some of the later planted fields may have had a burndown sprayed prior to planting. You never know what the weather will be like in the spring and timely weed control can be tricky. Most fields are sprayed in the spring. We are still encouraging that you do not mix your herbicide and nitrogen applications and spray separately. The leaf burning can cost us up to 10 bushels and could get worse as temperatures increase.

If grasses such as roughstalk bluegrass and cheat are a problem, Osprey does a good job of cleaning them up. It has no activity on broadleaves. Research by Russ Hahn has found that it has been very effective on bluegrass with better control achieved in the spring versus the fall. It can be applied up the jointing stage in winter wheat.

Fungicides. We have seen that fungicide applications in wheat can really pay off. Powdery mildew and leaf rust can move in during the early vegetative stages and result in yield losses. These leaf diseases can be more prevalent with thicker wheat stands. Weather conditions also can play a role. Wet, cool conditions are more conducive to disease development. In last month's AgFocus, I wrote about powdery mildew affecting wheat fields in NWNy last December. This means that early scouting of all your wheat fields is crucial to stay on top of this disease this spring! Look for large areas where the leaves are turning yellow. Lower leaves will gradually turn light brown. If you applied higher N rates (90-120 pounds), fungicides are even more important to keep the wheat healthy to prevent lodging.