

Weekly Article

Evaluation of Winter Wheat Stands

1-19-2021

Hello, my Name is Richard Purdin with OSU Extension, Ag and Natural Resource Educator and Community Development Educator for Adams County. I hope to better inform local producers and the public of the latest news in the world of agriculture. Last week's weather gave farmers a great opportunity to get some field work accomplished. With the drier days and frozen ground, I noticed many producers spreading manure or injecting manure in the soil. Late in the week and into the weekend presented some change with slightly warmer temps and mixed snow and drizzle just about every day, hopefully some sunshine will appear soon!

Snow in the wintertime is not all a bad thing. For wheat and other small grain producers, sufficient snow fall throughout winter can be a blessing. This time of year is a great time to get out and evaluate the health and stand of your small grain crop. There are many factors that can affect the overall survival of small grain crops such as winter wheat during the winter months. Here are just a few:

1. Winter survival starts at planting. It is crucial to plant winter wheat on time. For Adams county the hessian fly date is our target planting date. October 4th through October 18th has been shown to allow wheat to emerge and establish properly for winter. Planting winter wheat varieties that are winter hardy and disease resistant is very important.
2. Planting depth and population will play a key role in winter survival. Planting wheat at depths of 1 – 1.5 inches deep will allow young seedling roots to establish deep enough that early freezes will not affect growth. For Ohio, the optimum seeding rate is 1.2 to 1.6 million seeds per acres or 18-24 seed per foot of row in 7.5-inch row spacing for later planted wheat this should increase to 1.6-2.0 million seeds per acre or 24-30 seeds per foot of row. Depending on seed size this would equal anywhere from 70lbs per acre to 200lbs per acre.
3. Proper fertility is critical for winter survival. Nitrogen applications will take place in spring during green up and growth stage 6 on the Feekes scale. Adequate Phosphorus and Potassium levels will allow wheat roots to grow strong and better adapt to winter freeze and thaw cycles. Soil test levels for Phosphorus should be between 15ppm and 40ppm for adequate wheat growth. Potassium levels should be between 100ppm and 175 ppm for optimum growth.
4. Adequate snowpack, this is one that is completely out of farmers hands, but it does have a major effect on winter survival and yield. Wheat has a unique ability to handle cold temperatures. Prior to growth stage 6 (first visible node or just above your ankles in height) the growing point is under the soil surface. Therefore, it is important to avoid planting winter wheat too early. Snowpack will insulate the wheat plant rather than cold dry freezes and ice accumulation will cause suffocation. The old theory of free nitrogen with the snow is true. Considering our atmosphere is full of nitrogen, snow can provide

some nitrogen but not much. Research shows level can be as much as 0.3 pounds per acre of available nitrogen.

Some other details to go over:

- The OSU Extension Office is open by appointment only. If you need assistance you can contact us at (937) 544-2339
- 2021 Fertilizer/Pesticide Private Applicators in person course is planned for March 9th at the Cherry Fork Community Center (gym) 5:00pm – 9:00pm. If you need recertified, you should get an invitation in the mail. (due to covid19 date is tentative and susceptible to change)
- OSU Extension Department of Agricultural, Environmental, and Development Economics will be presenting the 2021 Climate and Grain Market Outlook January 22nd from 3:00pm to 4:00pm, February 19th 10:00am-11:30am. Go to https://osu.zoom.us/webinar/register/WN_Wli8sVbSR5i3yqTqtBrj6A to register for the virtual event.
- February 15th, 22nd, and March 1st OSU will be hosting a three-part workshop on Farm Succession Planning. This workshop will be offered virtually 6:30pm to 8:30pm. The course fee is \$40 per farm family. The deadline to register is February 10th go to go.osu.edu/farmsuccession to register
- For producer who still have not yet elected a 2021 crop safety net program Agriculture Risk Coverage or Price Loss Coverage webinars will be January 13th from 1:00 to 3:00 pm and February 25th 9:00 -11:00am. Go to <http://go.osu.edu/arcplc2021>. The deadline to sign up for this program will be March 15th, 2021
- January 4th General CRP signup begins, and CRP Grasslands signup will begin March 15th, 2021 and conclude April 23rd, 2021 contact the farm service agency for assistance in signing up for these programs.
- OSU Extension Beef Team will have their next Cow -Calf School via Zoom on January 25th at 6:00pm. The topic includes Addressing hay shortfalls, using annual forages, and baleage does and don'ts. Go to https://osu.zoom.us/webinar/register/WN_N_CtcKYwQB2l60Afug10aA to register.