## Wheat Crop is in Tough Shape

Heading into Thanksgiving week, the 2013 wheat crop is rated at just 30% good to excellent - the second poorest wheat crop in mid-November that Kansas Agricultural Statistics has ever recorded.

Wheat farmers should be scouting fields to see whether pest, weed or nutrient problems exist, suggests Jim Shroyer, wheat specialist at Kansas State University. Throughout Kansas, the crop is in various stages of growth and conditions. At K-State's Agronomy Farm north of Manhattan, the agronomist sees a couple of issues that could impact the crop.

"The first thing I saw is poor growth of secondary roots, or crown roots," he says. "This lack of crown root development is due to dry topsoils. A wheat plant should ideally have a well-developed crown root system by now to help prepare it to survive the winter."

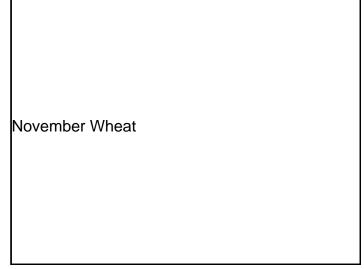
Shroyer notes that at the Agronomy Farm, the crown root is starting to grow. In a normal year, the crown root

system is, or should be, much more extensive than the primary root system. Crown roots take up most of the water and nutrients from the soil, so they are very important for the plant to survive the winter. Also, crown roots anchor the plant to the ground.

"By this point in the season, there should be a much more extensive crown root system than what I found," Shroyer says. "All we need is some moisture in the soil and these roots would quickly begin developing."

Primary roots coming from the seed take up water and nutrients throughout the whole growing season, but there aren't very many of these roots, and they will not support a plant with one or two tillers for very long.

Farmers throughout Kansas agree that the crop is challenged so far.



Poor stands of wheat throughout Kansas are caused in part by lack of precipitation. Just 30% of the state's wheat crop is in good to excellent shape, according to Kansas Agricultural Statistics.

Scott City farmer Rich Randall says the dryland wheat in Scott County is mostly in fair shape, but just needs precipitation. "About 20% of the dryland wheat is in poor condition. Some of it has been re-planted at least once and is short of moisture," he says.

This fall is unique in that it has stayed warm for so long. "The wheat isn't going into dormancy like it should by this time of the year," he adds. Actively growing wheat, he adds, requires soil moisture, which is in short supply this fall.

Justin Knopf, who farms near Salina, says primary and crown roots are slow to develop. "The crop has not grown actively, mostly due to lack of moisture. Temperatures have been conducive to root development, but we just haven't had any rain," he says. In the last 12 months, Knopf's area of Saline County has received about 12-inches less rain than the average of 29-inches.

Knopf says wheat is a grass and therefore "tillers," to branch out and grow extra plants. This fall, however, very little tillering has taken place. "Overall, the plant doesn't seem to be healthy or vigorous," he explains. "We're not in a big hurry to apply fertilizer on the crop. We just wait and hope for some winter moisture."