

June 21, 2016  
 FOR IMMEDIATE RELEASE  
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## Information for Wheat Harvest

There are several acres of wheat in the area. I thought this information that showed up in this week's CORN newsletter was good information to pass on at this time. This comes from OSU Extension's Ed Lentz and Laura Lindsey.

Wheat harvest will soon be underway; we often get questions about the nutrient value of straw. The nutrient value of wheat straw is influenced by several factors including weather, variety, and cultural practices. Thus, the most accurate values require sending a sample of the straw to an analytical laboratory. However, "book values" can be used to estimate the nutrient values of wheat straw.

In previous newsletters, we reported that typically a ton of wheat straw would provide approximately 11 pounds of N, 3 pounds of P<sub>2</sub>O<sub>5</sub>, and 20 pounds of K<sub>2</sub>O. Michigan State University reports similar numbers for a ton of wheat straw: 13 pounds of N, 3.3 pounds of P<sub>2</sub>O<sub>5</sub> and 23 pound of K<sub>2</sub>O. A 2013 analysis of wheat straw collected at the OARDC farm in Wooster contained 14-18 pounds of N, 3-4 pounds of P<sub>2</sub>O<sub>5</sub>, and 20-23 pounds of K<sub>2</sub>O. These values were across four wheat varieties and three spring nitrogen application rates (60, 90, and 120 lb N/acre). The 2013 values corresponded fairly well with the previously reported "book values." Nitrogen values in 2013 were slightly greater than "book values" which may have been a result of wheat height/size. If plants are shorter/smaller, percentage nitrogen tends to be greater than taller/larger plants due to a dilution factor as the plant grows. Regardless, the 2013 analysis provides validity to the nutrient value of straw given in previous newsletters.

The nitrogen in wheat straw will not immediately be available for plant uptake. The nitrogen will need to be converted by microorganisms to ammonium and nitrate (a process called mineralization). Once the nitrogen is in the ammonium and/or nitrate form, it is available for plant uptake. The rate of which mineralization occurs depends on the amount of carbon and nitrogen in the straw (C:N ratio). The USDA reports a C:N ratio of 80:1 for wheat straw which means there are 80 units of carbon for every unit of nitrogen. Mineralization rapidly occurs when the C:N ratio is  $\leq 20:1$ . At a C:N ratio of 80:1, mineralization will be much slower. (For comparison, corn stover is reported to have a C:N ratio of 57:1.) Rate of mineralization is also influenced by soil moisture and temperature. Since mineralization is a microbial-driven process, mineralization will be slowed (halted) in the winter when temperatures are cold. Thus, no N credit is given for wheat straw since it is not known when the N will mineralize and become available to the following crop.

Besides providing nutrients, straw has value as organic matter, but it is difficult to determine the dollar value for it. Removal of straw does lower soil potash levels. If straw was removed after heavy rainfall, some of the potash may have leached out of the straw, lowering the nutrient value of the straw. However, a soil test should be done to accurately estimate nutrient availability for future crops.



## **Estate & Financial Planning Follow-up**

Back in March/April we offered an Estate and Financial Planning workshop that offered a bunch of information in a short amount of time. We discussed a follow-up session toward the last of June or early July. We have a date, times and locations.

The date will be Thursday, June 30. We will meet at the Southern State Community College in Hillsboro at 2:00 p.m. and at Eastern Brown HS at 6:00 p.m. This is free and open to anyone.

### **Dates to Remember**

June 30 – July 2	Festival of the Bells in Hillsboro
July 10-16	Adams County Fair
July 23	Hops Yard Open House 10:00 a.m. several locations including 2 in Brown County and one in Clermont.