

News Article

By: John E. Woodmansee, Extension Educator, Agriculture/Natural Resources

E-mail: jwoodman@purdue.edu

Date: May 21, 2018

Please use by: May 31, 2018

Purdue Extension – Whitley County

Whitley County Courthouse Annex

115 South Line Street

Columbia City, IN 46725-2325

Phone: (260) 244-7615 or (260) 625-3313

www.extension.purdue.edu/whitley

Understanding agriculture – growing wheat

If you are one who is perplexed by simple questions about agriculture that you don't understand, read on. Today's article is a primer on growing wheat, written especially for non-farmers who may have always wondered about this crop.

In Whitley County, as in most of northern Indiana, the predominant crops we grow include corn, soybeans, wheat and hay.

Wheat is used for many things, and the first thing that comes to mind for most people is flour. However, it may surprise you to learn that the type of wheat we raise in Indiana, Soft red winter (SRW) wheat, is not typically used to make bread. According to USDA Economic Research Service, SRW wheat, accounting for 15-20 percent of total production, is grown primarily in States along the Mississippi River and in the Eastern States. Flour produced from milling SRW wheat is used in the United States for cakes, cookies, and crackers. Wheat can also be used for livestock feed.

Winter wheat is much different than corn or soybeans, in that it is planted in the fall, grows a little, spends the winter in a dormant vegetative state (similar to the grass in your lawn, although lawn grass is a perennial plant), then completes its maturity in early summer. We call these types of plants "winter annuals." Some common weeds also behave this way, including chickweed, henbit, and purple deadnettle.

When Hoosiers hear the song, "America the Beautiful," the phrase, "...amber waves of grain," certainly comes to mind when seeing a mature wheat field. After wheat is harvested for the grain, many farmers will bale the leftover straw for livestock bedding (scattered to provide a soft, dry place for animals to sleep), or for use in some feed rations (primarily dairy). Wheat is typically harvested in Indiana near Independence Day.

Many inputs are required for a successful wheat crop. These include seed, fertilizer, herbicides, and other crop inputs.

Purdue Extension experts construct annual average crop budgets for corn, soybeans and wheat. This information is available at Purdue Center for Commercial Agriculture: <https://ag.purdue.edu/commercialag/Pages/default.aspx>. Search for "Purdue Crop Cost & Return Guide."

Just to give you a feel for what farmers face in terms of costs per acre, let's explore some of the costs outlined in Purdue's guide (updated March 2018). For average productivity soil for wheat in crop rotation, farmers could spend, on average for one acre: \$73 for fertilizer, \$44 for seed, \$25 for pesticides, \$11 for machinery fuel, \$18 for machinery repairs, \$8 for hauling, \$6 for interest on borrowed money, and \$9 for insurance and other miscellaneous expenses, for a total of \$194 per acre. If we assume the crop yields 76 bushels per acre, and the selling price is \$4.30 per bushel, the total revenue for that acre is \$327. This leaves \$133 per acre for things like cash rent, labor and profit. In the most recent Purdue land values survey, average cash rent for average productivity soil in northeast Indiana was \$187 per acre. That leaves -\$54 per acre, a loss. Of course, all of these are averages, but it helps a person understand some economics involved. Weather extremes, production systems, price variability, and other factors and risks all come into play.

At harvest, farmers combine wheat and store the grain in a bin, or sell to the elevator. Some years, farmers may also have to dry the grain using heat, or pay a discount at the elevator for them to dry the grain. This must be done so that grain can be stored safely without risk of spoilage.

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran.

Purdue University is an Affirmative Action institution. This material may be available in alternative formats.

This time of year, farmers also worry about weather conditions that increase the risk of a disease called Fusarium Head Blight (FHB), commonly known as head scab. An on-line FHB Risk assessment tool is available at <http://www.wheatcab.psu.edu>.

According to the most recent statistics available, Whitley County harvested 6,700 acres of wheat in 2017, with an average yield of 76.6 bushels per acre. In 2016, Whitley County ranked 8th among Indiana counties in wheat production, harvesting 6,600 acres of wheat at an average yield of 87.1 bu./acre.

We have just scratched the surface on what it means to grow wheat. And, granted, there are a variety of management systems that farmers employ. Find Purdue Extension publications on a wide array of subjects at the Education Store: <https://mdc.itap.purdue.edu>.