

News Article

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Understanding agriculture – growing hay

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 hay, 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.

Hay is visually different than straw (the mature stems of wheat or oats) because hay retains its green plant color. Straw is never green, and the characteristic light yellowish color led to the term "straw-colored."

Hay is used to feed livestock, and it is especially important in winter months when pastures are not growing and not available for grazing.

Hay is a dried and (usually) baled forage crop. Bales may be the small rectangular bales (sometimes referred to as small "square" bales), large rectangular bales, or round bales. Dried hay can also be blown into a barn loosely, then fed to livestock by using a pitch fork, but it's not a practice used much anymore. (I'm old enough to remember doing this on our home farm).

Forage crops include a number of plant types, including legumes and grasses. Like soybeans, forage legumes can fix atmospheric nitrogen through nodules on the roots, and supply that nutrient to the plant. Examples of forage legumes include alfalfa, clover, and birdsfoot trefoil. Curiously, soybeans were originally grown in this country as a forage crop, not for the beans! Examples of forage grasses include orchardgrass, timothy, smooth brome grass and tall fescue.

Farmers may elect to have pure stands of a single forage species, a mix of forage legumes or grasses, or a mix of forage legumes and grasses. The species or mix of species grown is usually tailored to the type of livestock the hay will be fed to. Some horse owners prefer pure grass hay, while cattle growers may prefer a mix predominated by legumes.

Forages may also be ensiled, where the plants are chopped up or baled and stored before drying, allowing fermentation to take place. The result is a highly nutritious feed for livestock. Many cattle farmers make corn silage, a highly nutritious feedstuff made by chopping up the whole corn plant and ensiling. Forage crops used to make hay, many times, are ensiled in air-tight plastic bags that look like large marshmallows on the edges of fields. This product is also called haylage.

To make hay, a farmer must cut off these forage crops and allow them to air dry in the field. The plants are then raked into what is called a "windrow" before they are picked up, compressed and tied into a bale by a baler. The frustrating thing farmers face when making hay is weather uncertainty. If it rains while plants are drying in the field prior to baling, farmers must wait longer for the plants to dry out again prior to baling. Nutrient losses usually occur with rains, lowering the quality of the hay. Farmers have an expression regarding the importance of baling hay when it is ready (and avoiding possible future rain events): "Make hay while the sun shines."

Newly mown hay has a distinctly fresh scent. The song, "Back Home Again in Indiana," was sung many years prior to the Indianapolis 500 by the well-known Jim Nabors (TV character on *Gomer Pyle: USMC* and *The Andy Griffith Show*), and accompanied by the Purdue All-American Marching Band. It featured the lyric, "The new-mown hay sends all its fragrance, from the fields I used to roam..."

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Hay must be dry when baled, then stored in a barn. If hay is too wet when baled, then stored in a barn, there is danger of fire through spontaneous combustion. On my home farm, we lost a barn in a fire that began in hay that was stored a little too wet, and finally ignited.

According to the most recent statistics available, Whitley County harvested 3420 acres of alfalfa in 2016, with an average yield of 4.35 tons per acre, and a total production of 14,800 tons. In 2016, Whitley County ranked 14th among Indiana counties in alfalfa hay production. In 2015, statistics indicated 3970 harvested acres, an average yield of 3.40 tons per acre, and total production of 13,400 tons.

USDA separates their data collection into alfalfa hay, and "other hay." Other hay may include other legumes and grasses. In 2016, Whitley County harvested 1200 acres of other hay, at an average yield of 2.90 tons per acre, for a total production of 3460 tons. In 2016, Whitley County ranked 36th among Indiana counties in other hay production. In 2015, there were 1030 harvested acres, at 2.05 tons per acre, and 2100 tons of total production.