

## DeWitt County Soybean Harvest – Mr. Dave Steward

October 2017

### Questions and Answers:

1. **How many things do you think are made from soybeans?** Hundreds!
2. **What are some of them?** Food for animals, cooking oil (oil can be refined and used in pie crusts, baked goods, etc.), biodiesel, paint, crayons, candles, ink, industrial fluids and lubricants – the list goes on and on.
3. **Which part of the soybean plant do you think is most valuable?** The beans in the pods; that is where the oil and fiber comes from.



4. **How does a combine separate the parts?** Answers may vary here – students may guess that “it chops them off” or any multitude of answers – then Dave will explain. The basic answer is that it cuts them off, feeds them into the machine, and strips the leaves and stem from the beans. It keeps the beans in the machine’s holding tank, and chops up the stems, blowing them out the back of the combine and back on to the ground.
5. **What kinds of transportation does grain take from field to processor?** Generally: Tractor (with wagon), truck, train or boat (barge). Grain may be loaded directly from the combine into a truck to go to the elevator, or they will use a tractor and wagon/cart to fill the trucks. It depends on

the elevator, but it will then be put on a train, barge or truck to go to processing. Around here, it is typically trucked to ADM or put on a train to go to port.

6. **In what ways might nature help or hinder farmers?** Answers vary; think weather – drought of 2012 (bad); lots of rain during the growing season (good), etc. Nature can also help dry crops for harvesting – do you notice that corn and soybeans are not often harvested until they are mostly brown/yellow – no longer much green?

**Elevator:** A place where grain is taken after it is harvested; often the elevator purchases the crops and then is responsible for moving it to the next step, processing or export.

**Terraces:** Like steps; a series of flat areas of land that decrease erosion and help hold moisture where the crops need it.

**Yield:** How much of a crop is harvested. Often it is discussed in bushels per acre.

**Drainage tile:** A network of hose-like tunnels under the ground, which funnel moisture to or away from fields, depending on the needs of the field. This helps farmers use water more efficiently and avoid “drowned” crops in heavy rain. (This is like digging a trench from a puddle after a big rain).

## **Soybean Uses**

**Meal** – Illinois soybeans are dehulled and separated into meal and oil after harvest. Soybean meal is used to feed animals, and is very high in nutrients and protein. In Illinois, animal agriculture – mostly pigs – is the No. 1 customer for soybean growers, and accounts for 94 percent of the state’s total soybean use. The meal is also used in the aquaculture industry to feed fish.

**Oil** – Soybean oil from Illinois is used in everything from food to printing ink to fuel. It is most widely used in vegetable oil in the U.S., representing 65 percent of all edible fat and oil consumed by people. Soybean oil is also used to make biodiesel, used by many companies and school districts in the state. The fuel has confirmed performance and environmental benefits, including better fuel efficiency and prolonged engine life.

**Exports** – Soybeans are the top agricultural export for Illinois. Fifty-three percent of Illinois’ soybeans are exported, with a value estimated at \$3.1 billion.