

PUMPKINS

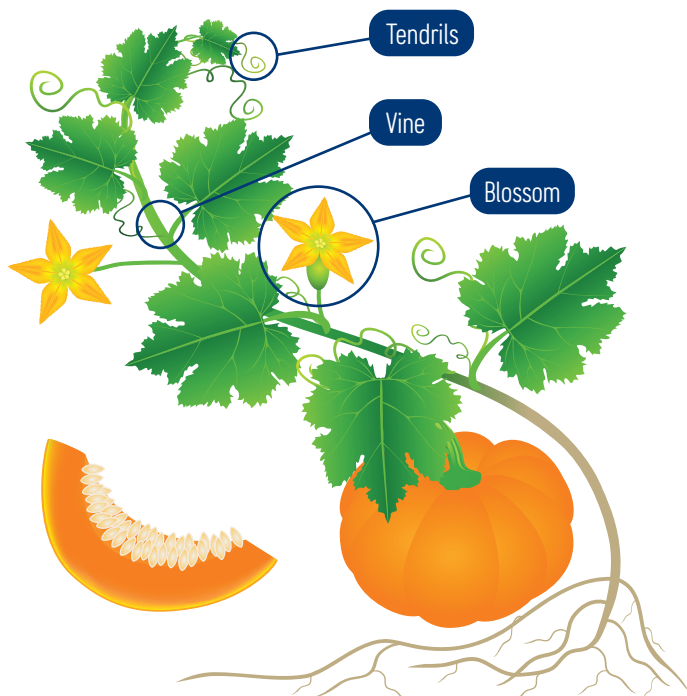
ILLINOIS IS #1 IN PUMPKINS

Illinois Farmers grow more pumpkins than anywhere else in the world!

WHAT ARE PUMPKINS?

Pumpkins are members of the gourd family. This includes cucumbers, cantaloupe, watermelons, and zucchini. These plants grow on a **VINE** and often climb using **TENDRILS**. They also have bright yellow or white **BLOSSOMS**. Pumpkins are originally from Central America and Mexico, but they are now grown on all continents except Antarctica.

Most pumpkins in Illinois are grown for processing. A small percentage are grown for ornamental sales. That means people use them to decorate or carve into Jack-O-Lanterns. These can be purchased through U-Pick farms, farmers markets, and retail stores. Processed pumpkins are turned into canned pumpkin and canned pie mix. Processing pumpkins have a similar size and shape to a watermelon. They have a lighter shell than ornamental pumpkins. Pumpkins can range in size from less than one pound to more than 1,000 pounds.



Over **85% of the world's** canned pumpkin is processed in Morton, Illinois at Libby's Plant. This is why **Morton is considered the Pumpkin Capital of the World!**

WORDS TO Know . . .

Vine: long flexible stems that trail along the ground or climb by clinging to a support with tendrils.

Tendrils: slender, coiling plant parts which help support the stem of some climbing plants by clinging to an object.

Blossom: the flower of the plant, which will turn into the pumpkin.

WHAT KINDS OF PUMPKINS ARE IN THE PATCH?

Pumpkins come in all different types called **VARIETIES**. Different varieties have different shapes, sizes, colors, and flavors. Sometimes pollen from one variety of pumpkin pollinates another variety and creates a brand-new type of pumpkin. This is called **CROSS-POLLINATION**. Pumpkin farmers and seed breeders have done this on purpose to create the variety of pumpkins used for processing pumpkin-flavored foods like pumpkin pie. These processing pumpkin varieties look very different and taste a lot better than the pumpkins we carve into jack-o-lanterns for Halloween.



WHY ARE PUMPKINS SO POPULAR?

Pumpkins have a rich tradition in America. The pumpkin helped keep new European settlers alive after they failed to grow wheat and corn. Native Americans used pumpkins to get through long winters. Over time, they found many ways to enjoy the sweet inner meat of the pumpkin. They added pumpkin blossoms to soups, turned dried pumpkin into flour, and munched on seeds as a snack.

Pumpkins were so useful, Irish immigrants even turned their tradition of carving faces in turnips into carving jack-o-lanterns at Halloween. Today, Illinois is the number one pumpkin producer in the U.S. For that reason, pumpkin pie became the Illinois State Pie in 2015. Pumpkin pie is a favorite at Thanksgiving. Orders surge dramatically during the holiday season.



WHAT ARE THE "THREE SISTERS"?

Native Americans developed a way to grow pumpkins called the "Three Sisters." They planted corn, beans, and pumpkins together in one place. These "Three Sisters" worked together to help each other grow. The corn stalk grew sturdy and supported the bean plant. The bean plant added nitrogen to the soil, which helped the corn plant grow. The pumpkins provided a ground cover of shade, which helped the soil stay moist and kept weeds from growing.

Today, pumpkin farmers use different practices to make sure their crop is successful. Pumpkins are grown in all 50 states, but Illinois grows the most by far. Counties like Tazwell, Peoria, and Mason in the central part of the state provide the perfect soil and climate conditions for growing pumpkins.

HOW DO PUMPKINS GROW?

Pumpkin Blossom:

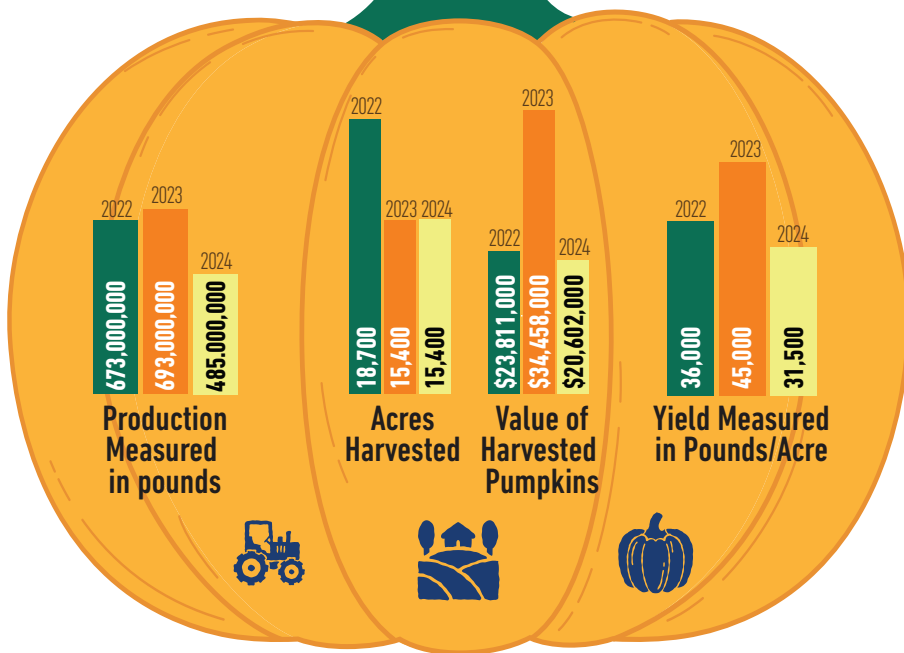
As the pumpkin vine grows, it has yellow blossoms, or flowers. After pollination, the blossoms will begin to grow into pumpkins. These blossoms are important for pollinating pumpkins.

Pumpkin Seed:

All pumpkins start out as seeds. With plenty of sunlight, water, and rich soil, the pumpkin seed grows into a pumpkin vine.



ILLINOIS PUMPKIN PRODUCTION



WORDS TO Know . . .

Variety: a kind or type of pumpkin.

Cross-Pollination: the transfer of pollen from the flower of one plant to the flower of a plant with a different genetic makeup.

WHY ARE PUMPKINS "GOURD" FOR YOU?



- Pumpkins are high in beta-carotene which is converted to vitamin A in the body. Vitamin A helps your bones and cells develop.

- Pumpkins can help increase your body's white blood cell production and strengthen your immune system due to the vitamin C they contain.



- The vitamin C, vitamin E, and antioxidants found in pumpkins helps promote healthy eyes.

- Pumpkins are extremely low in calories. They have only about 50 calories per cup since they are more than 90% water.



- Pumpkins are high in fiber which helps you maintain a healthy digestive system.

HOW ARE PUMPKINS HARVESTED?



Find out by watching our **Awesome Agriculture: Pumpkin** video. Use the QR code to access the video.

...s, it starts to produce pumpkin
er pollination, these blossoms
mpkins. Insects, such as bees,
ing pumpkins.

Mature Pumpkin:
Pumpkins are harvested once
they have finished maturing and
their rind is hard.

DID YOU KNOW?

Pumpkins produce
separate male and
female flowers on the
same vine.

Mid-Season Pumpkin:

After pollination, a tiny green pumpkin, or bud, starts to grow at the base of the blossom. Over time, this bud grows and changes in color. Most pumpkins turn from green to orange.



HOW DO PUMPKINS SIZE UP?

Let's hear from two different pumpkin farmers in Illinois to compare processing pumpkin farming to ornamental pumpkin farming.

"Pumpkins are our best cash crop 8/10 years. Diversifying crops, more than just corn and soybeans, helps us be successful and makes every day different."



Luke Clark, 7th generation owner of Clark Farms located in Chandlerville, Illinois.

"Pumpkin farming is not all big orange carving pumpkins. There is a whole different group of colorful decorative pumpkins."



Cody and Maria Blunier, owners since 2023 of The Pumpkin Place located in Princeville, Illinois.

PROCESSING PUMPKINS



Market

- Contract with Seneca Foods in Princeville, IL (canned pumpkin then sold wholesale to stores)



Uses

- 100% gets processed and canned for pies and other pumpkin foods



Planting

- Work ground with harrow (removes ridges and trash for better yields)
- Seneca Foods plants with machinery
- Every other row planted (60 in. rows)
- Plant in IL mid to late May for warm temperatures. Completed before June
- A couple varieties planted



Harvesting

- Machines windrow and cut pumpkins off vines
- Harvesters roll pumpkins up conveyer and dump in carts
- Some are smashed but still used
- From Oct. 1st to mid Nov. (weather dependent)

ORNAMENTAL PUMPKINS

- Mainly retail to individuals
- Some wholesales to greenhouses or porch decoration businesses to stores)

- Fall decorations
- Jack-o'-Lantern carving

- Plant all by hand as a family
- Seeds placed on soil hill and kids push just below surface
- Start middle of May and plant every 5 days through June
- Varieties mature at different rates; all are ready by Labor Day Weekend
- Over 200 varieties planted

- Each pumpkin is picked by hand
- Leave bug eaten or soft ones in field
- Cleaned at the farm
- Pick for about an hour a day after work
- Restock all varieties each Saturday
- From start of Sep. to end of Oct.

Information in this Ag Mag complements the following learning standards:

Common Core State Standards:

ELA - RI.4.1; RI.4.2; RI.4.3; RI.4.4; RI.4.5; RI.4.7; SL.4.1 ; SL.4.4;
L.4.4 ; L.4.6 | Math - MD.3.3; NBT.4.2; NBT 4.4

Next Generation Science Standards:

3-LS1-1; 3-LS1.B; 3-LS3-2; 3-LS3.B; 3-LS4-3; 4-LS1-1; 4-LS1.
Social Studies - SS.4.EC.1-2; SS.4.H.2

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