

The Very Hungry Illinois Caterpillar



On an Illinois
farm, a little EGG
lay on a LEAF.



One Sunday morning,
the warm sun came
up and - POP! - out of
the egg came a tiny
and very hungry
CATERPILLAR.



He started to look for
food that grows in Illinois.



WATERMELONS

This favorite summer treat is part of the cucumber and pumpkin family. Members of this family have separate male and female flowers. Therefore, watermelons rely on bees for pollination. Bees carry pollen from the male flower to the female flower.

Originally from Africa, watermelons are grown in all parts of the country, but they prefer a warm, moist growing season. Additionally, watermelons grow best in a sandy loam soil. All of this makes Western and Southern Illinois perfect places to grow watermelons. There are over 120 farms that produce watermelons in Illinois, which totals to nearly 1,500 acres of land.

On a historical note: In 1853, town developers approached Abraham Lincoln, who was then serving as an attorney, to have a town named after him. Lincoln agreed and then christened the town. He grabbed a watermelon off of a farmer's wagon and performed a brief ceremony using the watermelon's juice. This town was Lincoln, Illinois.

On Monday,
he ate ONE
WATERMELON. But
he was still hungry.



PUMPKINS

It may surprise you to learn that Illinois farmers grow more pumpkins than anywhere else in the world. There are 475 Illinois farms that produce pumpkins, which totals to 12,300 acres of land. Our farmers grow 90 percent of the pumpkins used for processing. These pumpkins are processed into canned pumpkin and canned pie mix. Much of this processing occurs at Libby's pumpkin processing plant, located in Morton, Illinois. Morton is known as the "Pumpkin Capital of the World."

Like watermelons, pumpkins prefer a warm, moist climate and a sandy soil. A large number of pumpkins are grown in Central and Northeastern Illinois. However, you can find pumpkins growing all over the state of Illinois.

On Tuesday,
he ate TWO PUMPKINS.
But he was still hungry.



SWEET CORN

Sweet corn is a sugary-seeded type of maize. It is the result of a genetic change in field corn, which causes the kernel to store more sugars than field corn, giving us the sweet tasting corn that we love to eat. Sweet corn types vary in sugar levels. Not all sweet corn is equally sweet!

Sugar levels are not the only difference between field and sweet corn. Field corn kernels are larger and golden yellow in color. Sweet corn kernels are smaller and come in combinations of color such as white and light yellow. Can you find other differences?

There are over 500 farms in Illinois that produce sweet corn. In 2002, Illinois farmers planted over 23,000 acres of sweet corn. The rich soils, moderate rainfall and warm weather of Illinois make it an ideal place for growing sweet corn.

On Wednesday,
he ate THREE
EARS OF SWEET CORN.
But he was still hungry.



HORSERADISH

Horseradish is a root vegetable that is harvested in the spring and fall. It is a member of the mustard family along with cauliflower, brussel sprouts and radishes. Horseradish is best known for its strong taste and aroma, which are most apparent when it is grated or ground. Horseradish is processed into sauces, dips and mustards. The most popular horseradish product is horseradish sauce, which consists mainly of ground horseradish and vinegar. The vinegar helps to neutralize the strong horseradish flavor.

Collinsville, Illinois is known as the "Horseradish Capital of the World." Collinsville and the surrounding area are part of the American bottoms, a Mississippi river basin. The basin's soil is rich in potash, a nutrient on which horseradish thrives. This area produces 60 percent of the world's horseradish supply.

On Thursday,
he ate FOUR
HORSERADISH roots.
But he was still hungry.



SOYBEANS

Soybeans are pea-sized legumes. They are in the same family as peanuts, peas and beans. Soybeans grow on bushy plants that are three to five feet tall. During their growing cycle, the plants develop small pods of soybeans. Each plant may have sixty to eighty pods of beans. Inside each pod, you may find two, three or even sometimes four soybeans. Now, that's a lot of beans! Soybeans vary in color, but the most common color is tan.

Soybeans have a variety of uses. They are used to make animal food, tofu, salad dressing, and even chocolate! Soybeans are not only used in food, but also in many products that you use every day such as crayons, plastics and inks. Did you ride the school bus today? Your bus probably used a fuel made from soybeans called soy biodiesel.

Soybeans need warm weather and the right amount of moisture to grow. Illinois and other Midwestern states are great places to grow soybeans because of the rich soil and the hot, humid summers. Illinois is ranked second in soybean production, producing over 3.5 million bushels of soybeans in 2007.

On Friday, he ate
FIVE SOYBEANS.
But he was still hungry.



WHEAT

Illinois farmers grow a soft red winter wheat. Does this wheat grow in the winter? Sort of! Soft red winter wheat is planted in late September. After some initial growth, wheat is dormant during much of the winter. In late winter, the growth begins again. Wheat begins to head in May, which means the familiar looking top starts to develop. It is harvested in the middle of June.

Soft red winter wheat does not have the level of protein and gluten needed to make bread. Instead, this wheat can be used to make cereals, cakes, pancakes, and ice cream cones. Most of our state's wheat is produced in the southern half of Illinois. Southern Illinois offers a longer growing seasons, so many farmers will harvest wheat and then plant soybeans. This practice allows them to earn more money and remain competitive with other farmers. In 2007, Illinois farmers produced close 50 million bushels of wheat.

APPLES

Did you know that there are over 500 orchards in Illinois that grow apples? This totals to nearly 4,000 acres of Illinois land used to grow this delicious fruit. These apples are sold fresh or made into applesauce, apple juice or dehydrated apple products.

In 2007, the GoldRush apple was named Illinois' state fruit. This variety of apple was named based on its golden yellow color and the "rush" of flavor you taste during the first bite. There are nearly 100 apple varieties grown in the United States. But, some of the most popular are Red Delicious, Gala and Granny Smith.

On Saturday he ate...

1 Acre of WHEAT



1 Bushel of APPLES

FIELD CORN

Field corn has a hard outer shell that is golden yellow in color. This type of corn is also known as dent corn, because the kernel forms a dent on the cap or crown at maturity. These characteristics make it different from sweet corn! Field corn can be processed into different usable by-products. These by-products are used in more than 4,200 products. You may find its by-products in foods you eat for lunch, such as yogurt, granola bars, cookies, and corn chips. Field corn is also used to make other items, such as crayons and chalk, which you use everyday at school.

The United States grows more field corn than any other country, with Illinois being the second largest producer. In 2007, Illinois farmers planted over 14 million acres, which yielded over 2 billion bushels of field corn. Counties leading in production of field corn include McLean, Livingston, Bureau, Sangamon, and De Kalb.

GRAPES

Several different varieties of grapes are grown in Illinois, such as Concord and Niagara. The key characteristic of these varieties is that they must be able to survive Illinois winters. It might surprise you that in a state that grows corn and soybeans, farmers also grow grapes. The number of Illinois grape growers has increased over the past few years, totaling 271 growers in 2007. Most of Illinois' grapes are grown on the hills of Southern Illinois. However, grape orchards can be found throughout Illinois.

1 Acre of FIELD CORN



1 Bushel of GRAPES

GREEN BEANS

Green beans are long, slender pods with beans inside. The entire bean including the pod and seeds can be eaten. They are in the legume family with soybeans, but these two beans are very different. Green beans are bright emerald green and come to a slight point at either end. They are a warm season garden vegetable that ranks second to tomatoes in popularity.

Green beans originated in the warm regions of the Americas, India and China. The French were the first to put green beans on their menu. Today, green beans are grown throughout the United States and they can be found in many Illinois gardens. Illinois farmers grow green beans for processing plants such as Del Monte and Green Giant.

POPCORN

Popcorn is a whole grain maize product. Popcorn kernels are the only corn kernels that can pop, because its kernels contain a small amount of water in the center. When heated, this water boils and turns to steam, which creates pressure within the kernel. This pressure causes the kernel to POP! Compared to field corn, the kernel size is smaller and may come in a variety of colors ranging from yellow to purple.

Did you know that popcorn is Illinois' state snack food? That's right! Second and third grade students from Joliet, Illinois proposed popcorn as a state symbol. Popcorn is a popular snack. Americans eat 16 billion quarts of popcorn each year, which equals to 59 quarts per person. So, it is a good thing that Illinois farmers produce a lot of popcorn. Farmers use over 28,000 acres of Illinois land to grow our state snack.

1 Bushel of GREEN BEANS



1 Acre of POPCORN

PEACHES

Peaches are best known for their fuzzy skin and beautiful colors. There are over 300 varieties of peaches grown in the United States. These varieties vary in color and can be red, pink, yellow, white or a combination of these colors. Peaches belong to the rose family and grow on trees just like apples or pears.

Peaches are native to China. Spanish explorers brought peaches to Florida during the 1500's. From there, peaches spread throughout the United States. Today, there are nearly 300 orchards that produce peaches in Illinois. A majority of these orchards are in Southern Illinois. Producers in this area rely on peaches as an important cash crop and also as a way to bring tourism to the area through pick your own orchards, farms stands and markets.

AND...

1 Big Giant
PEACH.



That night
he had a
STOMACHACHE!

MILKWEED

There are more than 100 species of milkweed. The common milkweed is native to most of North America east of the Rocky Mountains. It grows in sandy soils and likes lots of sunlight.

Insects such as the monarch butterfly live off of the milkweed plant. The toxins in the milkweed plant make the monarch caterpillar and butterfly distasteful to predators. After eating the milkweed, monarch caterpillars form their chrysalis under the leaves and on the stalk of the milkweed plant before hatching out as a butterfly. The butterfly then returns to the milkweed plants to feed on their flowers and nectar.



After an entire week
of eating Illinois crops,
the caterpillar ate
through one
MILKWEED LEAF.
After that, he felt
much better.



Now he wasn't hungry anymore-
and he wasn't a little
caterpillar anymore. He was a BIG, FAT
Caterpillar.

That night, he built a small house, called a **CHRYSALIS**, around himself. He stayed inside for more than **TWO WEEKS**.



Then he nibbled a hole in the chrysalis, pushed his way out, and...

MONARCH BUTTERFLIES

The monarch butterfly (*Danaus plexippus*) is very special. It became the state insect of Illinois in 1975, after being proposed by a 3rd grade class at Dennis School in Decatur and signed into law by Governor Daniel Walker.

A Monarch is poisonous, due to eating the poisonous milkweed plant. Because of this, it is not eaten by birds. The butterfly is easily recognizable by its orange and black wings. A male Monarch looks just like the female, except for 2 spots on his hind wings.

Another thing that makes the monarch special is that each year, the fourth generation of the Illinois butterfly migrates 2,500 miles to Mexico for the winter. Here's how monarch butterfly "generations" work: Monarchs that migrate to Mexico in the fall go into hibernation for the winter. In the spring, they come out of hibernation and find a mate. Then they fly back north from Mexico to Illinois and lay their eggs on milkweed plants. (Monarch butterflies must lay their eggs on milkweed plants, as this is the only food the monarch caterpillar can eat. This is why milkweed plants are known as "host plants" for monarchs.) These eggs are the first generation of the year. The eggs hatch, the larva (caterpillars) feed, then form a green chrysalis, and later emerge as butterflies—all in about 20-33 days. These butterflies mate and lay eggs for the second generation of the year. The eggs hatch in May and June, go through the life stages (larva, chrysalis, butterfly) and lay eggs for the third generation of the year. The third generation born in July and August, having gone through its life stages, lays the fourth generation eggs. The fourth generation eggs go through the same life stages, but instead of mating as soon as they reach the butterfly stage, they fly south to Mexico to hibernate over winter. These "great grandchildren" of the migrating butterflies of the past fall start their migration journey in October. The fourth generation Monarchs live for 6-8 months, while the other generations live only 4-6 weeks.

He was a BEAUTIFUL
ILLINOIS BUTTERFLY!

Agriculture

life line to the world



Macoupin County Agricultural Literacy Program

Connie Niemann, Coordinator

#60 Carlinville Plaza

Carlinville, IL 62626

Phone: (217)854-9604

E-mail: cniemann@illinois.edu

<http://web.extension.uiuc.edu/macoupin/aglit>



Illinois AGRICULTURE in the ClassroomSM

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