

ag mag





From Our Farm to Your Home



Farming/Agriculture



Illinois is a state with deep roots in agriculture. Did you know that 30.7 million acres of our state are available as agricultural land? On these millions of acres, farmers and farm families are growing and raising our food and fiber.

Livestock production is an important part of Illinois agriculture. Farmers supply us with products we depend on. Our lives revolve around having access to affordable, high quality food, clothing and supplies. Farmers must have knowledge, skill, compassion and patience to make sure we have these products.

Livestock farmers spend much of their day caring for their animals. They make sure the animals are safe in their housing and monitor their nutrition and health. Through continued education and special relationships with universities and other professional services, farmers ensure their animals receive the highest level of care. Millions of dollars are spent on research and development for equipment, facilities, nutrition and health products that keep livestock animals healthy and productive.



Jim Fraley Livestock Program Director Illinois Farm Bureau

My name is Jim Fraley. I am the Livestock Program Director for the Illinois Farm Bureau. I work with farmers on a variety of issues: regulatory, legislative and even educational. A big part of my job is helping farmers be successful.

Illinois is blessed with great commodities and growing conditions. In other words, we grow an abundant supply of corn and soybeans. These commodities are found in products that are fed to pets and livestock, and used by us daily. Economically, it is better to raise livestock where their feed is grown. Illinois ranks high in corn and soybean production in the United States; second in corn, and usually first or second in soybeans. This makes Illinois a good place to raise livestock. Our state is ranked fourth in the country for swine production and high for dairy, as well. In fact, Illinois was once the center of the nation's milk production.

Animal Care



Dr. Bob Ebbesmeyer, DVM New Hope Veterinary Clinic German Valley, Illinois

During your career, what changes have you seen take place on animal farms?

One of the changes I have seen in animal care over the years is more emphasis on animal health. Farmers do many good things to keep their animals healthy. One of the basic things farmers do is give their animals vaccinations and regular health checks. Farmers today take complicated steps to make sure their animals are healthy. For example, farmers build brand new buildings to protect animals from hot and cold weather. These building can cost millions of dollars to build. Farmers also use computers to monitor the health and diet of their animals. Technology helps farmers and veterinarians keep track of several things on the farm for example how much milk a cow is giving and how fast their calves are growing.

How do you work with farmers?

No farmer wants sick animals. That's why farmers work hard to keep their animals clean, dry and comfortable. This helps prevent disease. I spend a lot of my time helping farmers keep their animals healthy. We take our time and examine each animal. I may visit a farm once a month, or even more often, to conduct regular check ups on the herd to prevent illness. To-gether, the farmer and I check to see if the animals are pregnant or how well they are responding to a new diet. We look to see how their calves are doing. Are they healthy and growing? I also make sure no animals are ill and if they are, I evaluate and decide what is the next step to take care of the animal.

About

Marketing of Illinois' agricultural commodities generates more than \$9 billion annually. The marketing of livestock, dairy and poultry accounts for about 23 percent of that \$9 billion.

Likes Inside



The Highest Quality Milk

Dairy Cattle



Nutrition and Food Safety: Facts to Know



Beef: It's Whats for Dinner

onigin fa food en, a out or dr life and g Terms: Words You Need To Know



Pork: Be Inspired!



Poultry: The Chicken And The Egg Did you know that milk is often referred to as nature's most perfect food? Each glass contains important **nutrients** you need daily for a healthy diet. Illinois dairy farmers work hard to keep their cows healthy so they can produce the world's best milk. Good dairy management practices include proper animal selection, nutritious feed that is safe and managing overall herd health.

Did you know that Dairy cows must be milked at regular intervals, two times per day, seven days per week? Some dairy farms even milk their cows three times a day! Modern dairymen use mechanical equipment to milk, feed and care for their dairy herds. These modern machines help provide you with the highest quality milk.

Doug Block Hunter Haven Farms Pearl City, Illinois

What kind of barn do you have for your dairy cows?

We have 800 milking cows at Hunter Haven Farms, so good housing is important for our success. We have three free stall barns. Free stall barns are really nice because they allow the cows the freedom to move around. Our cows don't have an assigned stall or a specific area from which they have to eat.

How do you keep your dairy cows comfortable?

We want our cows to be healthy. Healthy cows produce more milk. The stalls they lie in are always kept clean and piled high with bedding so the cows can stay clean and dry. The bedding we use is a soft compost material, which we make here on our farm, from recycling manure and compost. Under the compost is a very thick layer of sand, which increases the comfort of the stall area. Each stall also has a bar in front of where the cows are laying. The bar makes the cow back up when they stand. Backing the cow away from the bedding, helps it stays clean. Cows don't sweat, but they do give off heat, so we have several fans mounted throughout the barns to keep the cows cool. We also have sprinklers over areas where the cows eat as another way to keep them cool in the summer. In the winter, our barn have curtains that go down to keep out the wind, rain and snow. Regardless of the weather, we are able to keep our cows comfortable because of the equipment we keep in our barn. We take great pride in keeping our cows healthy and **hardy**.

Beef Cattle

Beef, it's what's for dinner! Just as the slogan says, Americans eat lots of beef; on average, 64.4 pounds of beef a year. The most popular form of beef is ground hamburger. Beef is an excellent source of Zinc, Iron and Protein, essential **nutrient**s for a healthy diet. The United States raised 26 billion pounds of beef in 2009; 500 million pounds of that was from Illinois farms.

From the time a calf is **weaned** from the mother cow, it will take about 275 to 280 days of feed and care to prepare the animal for market. Compare that to 180 days that students are in school and you see that it takes a long time to raise a beef animal to market weight. When calves are **weaned** they weigh about 350 to 450 pounds, however, they must weigh 1200 pounds or more before they can be sold to market. Cattle farmers spend lots of time and money to provide beef cattle with the nutrition and environment they need to grow. The feeds must be fresh and appetizing. This is known as **palatability.**

Jeff Beasley Beasley Farms Creal Springs, Illinois

Tell us about your farm.

We run a diversified beef farm that has been in the Beasley family since 1918. We have a registered and commercial cow herd, bull and heifer development, including selling seed stock and we **background** and finish feeder cattle. Some of these cattle we raise, some we purchase to feed, and some we feed for customers. My father and I work together to manage all aspects on our cattle farm. I have always worked on this farm, but I have done it full time since 1993.

Why do you raise beef cattle?

I enjoy raising cattle and working outdoors. I also like the challenge of raising a quality beef animal that I know will someday become food that is safe, nutritious and delicious. The farm is a wonderful place to raise a family and we enjoy working together. It is a way of life that can't be evaluated by how much money you make, and I wouldn't trade this life or work for any other.

What do you want people to know about the beef industry?

Livestock farmers know it's important for beef animals to be a delicious source of protein. We ensure the quality of our animals through nutritious feed and a health program that we follow that helps our cattle maintain a healthy life. We also make sure that our cattle live in a safe and clean environment that is monitored on a constant basis.

How do you let people know that you take good care of your animals?

We are members of groups that support livestock and agriculture, such as the Illinois Beef Association and the Illinois Farm Bureau. Collectively, we work together as a larger group with legislators and government agencies to promote agriculture and protect us from unnecessary rules and regulations. It also lets us address the misconceptions about farming. We work with those groups to develop print and broadcast media that will allow us to tell our story.

Pigs

Pancakes with sausage, sausage pizza with cheese, or pork chops with apple sauce! Yum, yum! Can you think of more foods that might come from a pig? According to the National Pork Board, pork chops are our favorite cut of pork, followed by the pork tenderloin, pork ribs and ground pork. There are 2,864 swine farms in the state of Illinois that raise more than 2.6 billion pounds of pork a year.

Illinois is part of the Corn Belt which makes it a great place to raise pigs. Pigs eat corn and soybeans that we grow right here in Illinois. With good nutrition a pig uses almost all the **nutrients** in its diet to grow, making it an **efficient** animal.

Pig farmers pay careful attention to the environment in which pigs are raised. Modern day barns help farmers monitor their pigs' health. Barns that maintain temperatures between 70–75° Fahrenheit promote the well being of pigs.

Pat Bane Bane Family Pork Farm, LLC Arrowsmith, Illinois

How do you ensure the quality, safety and health of your livestock?

There are a lot of things we have to do to make sure the animals are healthy and safe. One of the most important would be having a standby generator. If there is ever an interruption in the electricity to the farm, the generator automatically powers on so that the animals are always comfortable. The ventilation, heating and evaporative cooling system can function in any type of weather. This means our pigs are always in their preferred temperature with fresh air. Along with the standby generator, we also have an alarm control system that monitors the electricity and the temperature of each room. If the animals get too hot or too cool, or if the electricity would go out, this alarm system notifies me by phone call 24 hours a day, 7 days a week, no matter where I am. I am always on call. We have a lot of measures in place to make sure that the animals are kept safe and healthy. Most people don't realize that caring for livestock is an every day task.

Has the care of pigs changed?

I've been around pigs all my life. People tend to think that pigs need to be outside like in the good old days. I raised pigs then too, and trust me, we have never treated the pigs better than we do today. When I was growing up, they were on open lots. When it was 20 below zero, they were outside. Yes, you bedded them, but it is not the same as being in a 70 degree room all the time. We didn't even know what an evaporative cooler was then. Sometimes animals died because it was too hot or too cold. That doesn't happen now because we invest a lot of effort and resources to make sure they are comfortable. The facility and the technology that we have incorporated are much better for the animals. It is ironic to me that people believe the way we are raising them now is inhumane. Because of improved practices I am more aware of the condition of the pigs at all times. In that respect, I know we have never treated the pigs better than we do today.

Animal Nutrition

Just like you, animals need many different **nutrients** to help them grow and stay healthy. Farmers continually research the best food and vitamin and mineral supplements to feed their animals.

The combination of food and added **nutrients** that farmers feed animals in a 24-hour period is called **rations**. Farmers work with veterinarians and animal nutritionists to make sure the **rations** include the right amount of energy, protein, vitamins and minerals. These **nutrients** must be in the proper balance. Too much of one or not enough of another can result in an unhealthy animal.

Two very important sources of **nutrients** are grown right here on Illinois farms. Can you guess what they are? If you guessed corn and soybeans, you are correct! Let's see why they are so important.

Cereal grains, like corn, are a great source for carbohydrates and are an important part of livestock animals' diets. Carbohydrates are important to farm animals because they give the animals energy. Carbohydrates power the muscular movements of walking, breathing and even the heart beating. Soybeans, on the other hand, supply protein to the animals' diets. Protein helps build muscles, healthy hair, hooves and skin. Most animals are fed soybeans in the form of soybean meal. Soybean meal is a flour made by grinding soybeans that have had the vegetable oil removed.

Tom Deters Effingham-Clay FS Total Livestock Services Sigel, Illinois

How do you help farmers care for their animals? I am a marketing manager with FS Total Livestock Services. I help dairy, beef, pigs and poultry farmers create balanced diets for their animals. Basically, I design a food guide for farm animal just like the USDA designs a food guide for people, but there is a difference. People choose what and how much they eat from each part of the guide.

I help farmers design the perfect diet for their animals. We design the animal's diet based on what crops a farmer has available. We add minerals and supplements so the animal has the best nutrition to help it grow.

Why is animal nutrition so important?

The animals' diet is the key to growth and good health. Healthy animals mean healthier, safer food for you and me. Diets are designed to promote the best health, growth, safety and the well-being of the animals.

Words Farmers Use

Background: time frame where a farmer prepares a beef animal to enter the feedlot after being **weaned** from its mother.

Efficiency: the degree to which something is done well or without wasted energy or effort.

Hardy: physically prepared to withstand fatigue, hardship or adverse physical conditions.

Nutrient: an element or compound that aids in the support of life.

Palatable: tastes good.

Ration: the total amount of feed that an animal is given in a 24 hour period.Wean: to start feeding a young animal feed instead of its mother's milk.Yearling: an animal between one and two years of age.

Chickens

Want to Learn More



In 2009, more than 1.2 million eggs came from 2000 farms in Illinois. Those eggs came from farms that feed chickens proper nutrition, take good care of the chickens and promote cleanliness in the pens, buildings and farms!

Farmers select breeds of chickens that are **hardy** and are able to lay the kinds of eggs people want to eat. A hen can begin laying eggs between 18 and 20 weeks of age. Once a hen starts laying eggs, she can lay one egg every 24 to 26 hours. That means a hen can lay five or six eggs each week. How many eggs could a hen lay in one year if she laid five eggs a week? (Hint: there are 52 weeks in a year)

Check out these websites that provide more information on farm animals and their care.

Illinois Beef Association – www.illinoisbeef.com National Cattleman's Beef Association – www.explorebeef.org/animalcare.aspx Illinois Milk Producers' Association – www.illinoismilk.org Midwest Dairy Association – www.midwestdairy.com Dairy Farming Today – www.dairyfarmingtoday.org Illinois Pork Association – www.ilpork.com U.S. Poultry and Egg Association – www.poultryegg.org American Egg Board – www.goodeggproject.org/from-farm-to-table American Farm Bureau Federation – www.conversationsoncare.com/ Illinois Horsemen's Council – www.horsemenscouncil.org/HCI/

Horses

Once a staple for the success of farming, horses in the United States are now primarily used for recreation. A recent USDA survey found that 75% of all the horses in the United States are owned for personal pleasure. So why a special section in the Livestock Production Ag Mag, you ask? Although horse owners do not market milk, meat or wool, horses are bred, raised, bought and sold like any other farm animal. Another reason is the economic impact the horse industry has for Illinois. It is estimated that more than \$16 billion is spent in the horse industry every year. Now that's a whole lot of dough! Even young people like you are becoming more interested in horses. The number of horse projects in the nation's 4–H and FFA programs is greater than any other livestock animal.

Just like other farm animals, the care of horses is an important issue to discuss. Horse owners want to make sure that they are doing everything possible to ensure their animals' health and well being.





April Walk Coyote Creek Stables Inc. Sigel, Illinois

What kind of safety precautions are you taking to ensure the quality, safety and health of your horses? Is it something you do every day?

We do a monthly maintenance and safety check of every pen, every stall and every pasture on the farm. We look for broken wire, wood that has been chewed, and anything that could be sharp or dangerous to the horse. We are out here pretty much all day, everyday. We monitor the horses constantly, checking to see if they are showing normal behavior, if they are limping or not acting healthy. Because we are with the horses so much, we will know right away if something is wrong. We try to fix problems before they occur.

What are some things you do for your horses so you know they are receiving the best care?

There are several things we do for our horses. One very important step is providing protection from Illinois weather. This includes horse stalls, lean-to shelters, wind breaks and shade in the summer. Also, I strongly believe in horses spending time outside of their stalls. A horse is healthier with regular exercise because their bodies were made to walk many, many miles a day in the wild while grazing. Time outside also stops horses from being bored, which leads to bad habits like chewing wood, which is bad for the health of the animal.

To help keep my horse healthy and in peak condition, I feed them good quality hay and a customized mix of grain and supplements. Every 2 or 3 weeks, the local elevator (a business that stores grains) mixes my feed to my specifications. I have many ingredients added, including vitamins like biotin for hoof and hair condition and minerals like selenium for muscle development. A healthy diet is essential to a healthy horse.



Chet W. Utterback University of Illinois

Supervising Agriculture Research Technician Champaign, Illinois

What's your role at the University's farm?

I manage the Poultry Research Facility, which is part farm and part research lab. My job is to coordinate the work that goes on between both the farm and the lab. I maintain the farm budget, manage the students who help on the farm and work with all professors who do research at the facility. I also oversee the animal care on the farm. I am in charge of hatching the chicks for research and for sale, as well as maintaining the flock of breeder birds that produce the eggs for hatching.

What does the university do with the chickens and eggs?

We provide chicks and adult birds for a variety of research projects, concentrating mostly on nutrition, environmental and ovarian cancer research. We sell fertilized eggs to farmers so they can hatch their own chicks and we also sell whole frying chickens to people to eat.

What measures do you see farmers taking to ensure the quality, safety and health of their chickens?

I feel that farmers and ranchers do a very good job of taking care of their animals and the land. We need to make sure that farmers continually improve the way they do things by raising healthy animals and food. We can do this through continued scientific research in the fields of animal care, animal nutrition and environment. It is also important to help educate food companies, grocery stores, food shoppers and cooks how to properly clean, cook, and store food.

How have you seen the care of chickens change?

In my 30 years raising chickens, I have seen farmers be very proactive and improve the way they raise safe, clean, wholesome food, while continually doing a better job caring for animals. Farmers continue to promote the well being of their flock. Farmers work harder today to promote better nutrition, easier access to water and are providing better veterinary care to stop diseases. Farmers also provide better management during molting (when poultry shed their feathers), and are providing improved housing methods.

Farm Facts:

94% of Illinois farms are family farms.



According to the American Council for Agriculture, today's farmer feeds 155 people worldwide versus 46.2 people in 1960.



Illinois' food and fiber industry employs nearly 1 million people.



 The FDA, Food and Drug Administration, regulates \$1 trillion worth of food a year. The FDA regulates all foods, exception of meat and eggs. The USDA, United States Department of Agriculture, regulates meat and eggs.

Information in this Ag Mag may be linked to the following Illinois Learning Standards: 1.A.2a; 1.A.2b; 12.A.2a; 12.B.2a; 12.B.2b; 12.D.1a; 12.D.3a; 12.D.3b; 13.B.2c; 13.B.2e Illinois Assessment Frameworks: 1.3.01; 1.4.01; 12.4.01; 12.4.02; 12.4.08; 12.4.09; 13.7.02



To learn more about Agriculture, visit us at www.agintheclassroom.org, or contact your county Farm Bureau[®] office or Illinois Agriculture in the Classroom, Illinois Farm Bureau[®], 1701 Towanda Avenue, Bloomington, IL 61701.