

# AGRICULTURE

is the world's largest industry. In the United States more than 21 million people work in some phase of the industry, from growing food to selling it at a supermarket. UConn students study a range of topics related to animal science including:

- ✦ Raising beef cattle and pigs for better quality meat
- ✦ Breeding and feeding dairy cattle to produce greater quantities of milk
- ✦ Improved reproductive efficiency of livestock
- ✦ Understanding of the biology of animal growth
- ✦ Improving the safety of animal-based food products

## TEST YOUR KNOWLEDGE OF THE ANIMALS AT UCONN BY CIRCLING THE CORRECT ANSWER

A. What is the breed of the black and white dairy cows?

Holstein   Guernsey   Ayrshire   Jersey

B. What product do we get from sheep?

Eggs   Piglets   Hay   Wool

C. The height of horses is measured by?

Feet   Hands   Inches   Arms

D. Which product is *not* made from milk?

Cheese   Barley   Butter   Yogurt

What is the name of a group of chickens?

Flock   Herd   Boar   Mare

### MATCH GAME

Find the word that best matches the animal and draw a line to connect the two.

Sow	Ewe
Rooster	Cow
Ram	Stallion
Mare	Boar
Bull	Hen

Answers:  
A. Holstein B. Wool C. Hands D. Barley E. Flock

## FOLLOW

The

# ANIMAL TRAIL

A Children's Guide to the Animals  
at UConn's Storrs Campus



UConn's College of Agriculture, Health and Natural Resources and Department of Animal Science welcome you to explore our barns to learn more about the animals we care for here. Our agricultural college was started in 1881 to teach students the business of farming. Today, animal science has expanded to include veterinary science, environmental health issues, nutrition, animal production, food science, biotechnology and genetics.



# DAIRY & BEEF

## CATTLE

At UConn, we raise both dairy and beef cattle. Female cattle are called cows, males are bulls and babies are calves. Dairy cattle are used primarily for the production of milk. Beef cattle are raised for their meat.

There are five different breeds of dairy cattle: Ayrshire, Brown Swiss, Holstein (the most popular in the U.S.), Shorthorn and Jerseys. At UConn, we have over 200 Holstein and Jersey cows. Holsteins are black and white and Jersey cows are light brown. Different types of cows produce different quantities and qualities of milk. Milk from different kinds of cows is blended to provide milk with consistent flavor and nutritional quality. For instance, the Jersey cow produces milk with low volume and more fat and the Holstein cow produces high volume with less fat.

An adult dairy cow weighs between 1,000 and 1,500 pounds. Cows eat hay, corn, and grains usually blended together to make a complete feed that provides the necessary nutrients. Cows eat about 90 pounds of food each day - that's the same as one person eating 480 hamburgers or 1,440 slices of bread! Cows drink between 20-25 gallons of water each day...nearly an entire bathtub full!

Cows have a unique digestive system that allows them to eat fibrous plant materials including hay and corn. The cow has four stomach compartments. As food and water passes through each of these compartments it is digested and nutrients are extracted to help the cow grow and to begin milk production.



The robotic arm will then clean and dry her udder, stimulate milk ejection release, milk the cow, and then send her back out into the herd.

At UConn, a cow will produce about 90 pounds of milk each day. This is equal to 10-11 gallons. At UConn, a cow lives about 6 years and during her lifetime she will have 4 calves and produce nearly 28,000 pounds of milk each year. Milk is processed to separate the cream from the milk. The cream and milk is then further processed to make ice cream, cheese, yogurt, and butter. Milk products are excellent sources of vitamin D and calcium for strong bones.

Students learn how to feed, clean, breed, and milk cows as well as show the animals at annual agriculture fairs. Cows may look alike but each animal's markings are like a fingerprint...no two cows have exactly the same pattern of spots. The numbered ear tags are attached to a cow's ear to also help us identify them. Cattle are herding animals and therefore are easy to move from place to place because they just follow each other.

All cows produce milk but they only do so once they have given birth to a calf. At UConn, dairy cows decide when they want to be milked (2 to 6 times per day). When she is ready, the cow will walk into the Voluntary Milking System to be fed a little food based on her needs and current milk production. We have about 50 mature beef cattle at UConn, mostly Black Angus and Herefords. Mature beef cows can weigh between 1,200 - 1,600 pounds. They eat the same plant foods as dairy cattle. From one steer a variety of products are made including meat (hamburger, steaks, ribs, roasts...) and leather from the hides for things such as shoes, belts, and furniture. Beef cattle cows provide milk to their calves but are not milked for human use.



# CHICKENS

There are over 150 varieties of chickens. At UConn, we have over 1,000 White Leghorn chickens. Leghorn Chickens are known for their ability to lay a lot of eggs. The average White Leghorn lays between 280-320 eggs each year. Our poultry barns are not open to the public.

A male chicken is called a rooster, a female is a hen and a baby is a chick. A group of chickens is a flock, and a group of chicks is a brood or clutch. It takes 21 days for a chicken egg to hatch. Chicken eggs can be white, brown, pink and even blue or green! Eggs have either single or double yolks and UConn's fresh farm eggs can be purchased at our Dairy Bar. Chickens used for meat purposes are very different in breed/type from those used for egg production.

Chickens cannot fly far as their wings are too short to carry their weight. They eat a mixture of grains and seeds. Chickens produce eggs and meat for us to eat, and feathers for pillows and mattresses. Within a henhouse there is a boss chicken and below the boss are sub-bosses and so on. Chickens peck one another to maintain this chain of command, referred to as "pecking order". Chickens, like all birds, do not have teeth and eat small pebbles and sand which are stored in their gizzard. Chicken feed entering the gizzard from the mouth is ground fine by these pebbles.

There are more chickens in the world than people - and in the United States there are 250 million people but over 8.5 billion chickens - that's almost 35 chickens per person!

# HORSES

About 85 horses live in UConn's Lorentzon Stables and other barns on Horsebarn Hill. Most of our horses are Morgans, Thoroughbreds or Quarter Horses and these animals are used for educational purposes, riding lessons, and polo games. Students learn how to ride, feed, breed, clean and train horses. Horses and riders learn how to perform basic paces such as walk, trot, and canter as well as how to jump both for fun and in competition.

A male horse is called a stallion and a female is called a mare. A foal is a baby horse. It takes 11 months for a horse to develop. A group of horses is called a herd. Most horses are born at night under the cover of darkness as protection for the foal. Horses eat grains such as corn, oats and hay. Adult horses are fed twice a day and eat approximately 30 pounds of food daily and drink 10-12 gallons of water per day.

Horses range in size and the height of a horse is measured in "hands". One hand is equal to 4 inches. The average horse is 15 hands, or 60 inches tall and is measured at the withers or high point of the shoulder. Horses weigh approximately 1,000 pounds. Horses are large yet gentle animals, they respond to their names and prefer soft voices. A horse can live for over 30 years. Horses often wear metal shoes that need to be changed every 6-8 weeks.

# SWINE

The 30 pigs living at UConn are primarily used for research to find ways to eliminate the shortage of organs used in transplant operations for humans. We have several kinds of pigs, the majority of which are Yorkshire, Landrace, and Hampshire. The swine barn is not open to the public.

Pig, swine and hog are all names for the same animal without regard to gender, size, or breed. A male pig is called a boar, a female is a sow and a baby is a piglet. A baby pig takes 3 months, 3 weeks and 3 days to be born. A sow can have as many as 14 piglets in a litter. Piglets nurse for 3-6 weeks and always suckle from the same nipple or teat.

Pigs grow quickly and eat meals consisting of soybean, barley, wheat, alfalfa meal and corn. An adult pig can weigh 600 pounds. Pigs have sensitive skin and no sweat glands. They roll around in the mud to keep their skin cool and protected from the sun. When the wind blows the water evaporates and cools them.

It is difficult to sneak up on a pig. A pig's field of vision is exceptional as they have eyes on the sides of their heads. They also have very good hearing and a keen sense of smell. Pigs are able to learn their names and can be trained like a dog.

Some of the products derived from pigs are meats such as pork roast, hot dogs, and bacon. The skin, or hide, of a pig is also used for things such as footballs. That is why a football is sometimes referred to as a pigskin! Hair from pigs is used to make hair brushes (boar's bristle brushes).

# SHEEP

We have a flock of 130 sheep living at UConn. Dorsets are all white, Southdowns have grey and brown faces and Shropshires have a black face. A male sheep is a ram, a female is a ewe and a baby is a lamb.

Sheep are bred for either their meat or their wool. A mature ewe produces 4 to 20 pounds of wool a year. A sheep's fleece or coat gets very thick and just as it doesn't hurt when a person gets their hair cut, sheep don't mind being clipped. Sheep are clipped, or shorn, once a year. Wool is cleaned, dyed, and spun into yarn to make clothing such as sweaters and mittens.

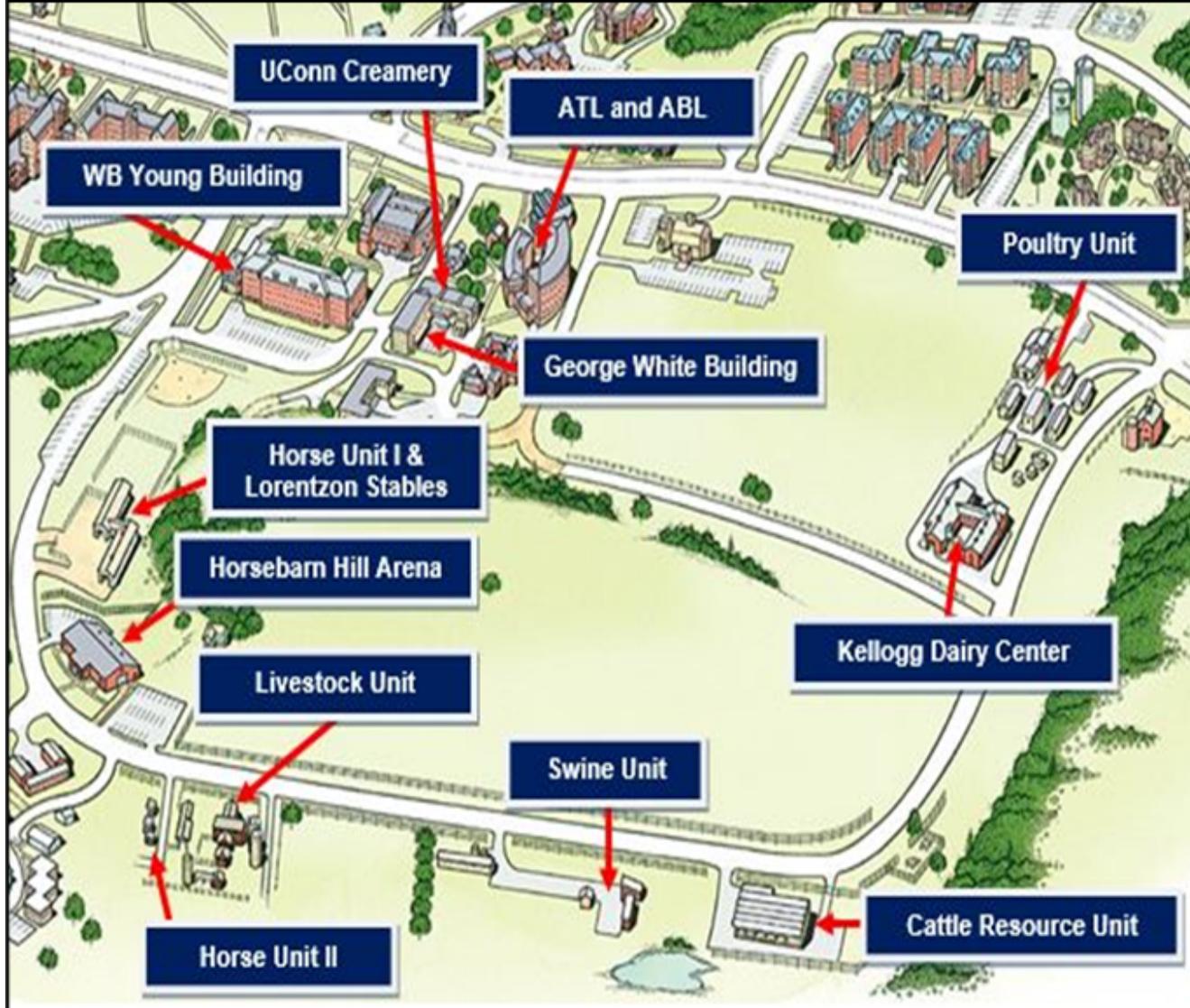
Lambs are born at UConn in January and February. Lambs nurse, or drink milk, for 3 months. Sheep's milk can also be used to make cheese. An adult female sheep weighs between 100-250 pounds and lives an average of 8 years.



# ANIMALS

have long been one of the world's most valuable resources providing people with: **food, clothing, transportation, & companionship.**

Modern animal agriculture is the business of producing, processing, and marketing high quality protein (meat, milk and eggs) and fiber for consumers, as well as working with animals that improve our quality of life through companionship, recreation and sport.



## Building List

- Horse Unit I (Horses)
- Arthur L. Lorentzon Stables (Horses)
- Horsebarn Hill Arena
- Horse Unit II (Horses)
- Livestock Unit I (Sheep and Beef Cattle)
- Livestock Unit II (Swine Unit) - no visitors
- Cattle Resource Unit (Heifers)
- Frances E. Osborne Kellogg Dairy Center (Dairy Cows)
- Poultry Unit- no visitors
- Poultry Unit I (Chickens) - no visitors

## UConn's Dairy Bar

Home of the famous Husky Tracks Ice Cream! Serving 20 flavors of ice cream, sorbet and seasonal flavors.  
Website: [www.dairybar.uconn.edu](http://www.dairybar.uconn.edu)  
Call ahead for hours- 860-486-2634

There are public restrooms available here, at the Kellogg Dairy Center and the Horsebarn Hill Arena.

