FARM ANIMALS

The process of people evolving from hunter-gathers to keepers of livestock and farmers began about 11,000 years ago. Why this happened is not known. Was the environment changing? Were their numbers increasing too rapidly to be sustained? Was it a natural progression in human development? Regardless of its cause, the results, over time, dramatically affected our way of life.

Today, few of us participate in the growing or raising of our food or making of our clothes. However, farm animals still provide us with some of our basic food and clothing needs. On a stroll through Ardenwood's farmyard you'll encounter some of the more familiar farm animals.

THE RUMINANTS

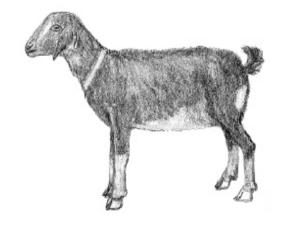
Cows, sheep, and goats are all mammals known as ruminants. They have an elaborate digestive system complete with four stomachs (rumen, reticulum, omasum, and abomasum). First, food is swallowed without chewing it completely. Then food goes into the rumen where it is stored and broken down into cud. Later the cud is regurgitated into the mouth, chewed into a pulp, and swallowed into the reticulum. In the reticulum, inedible fragments of stone are trapped while the remainder of the pulp is strained into the omasum. From the omasum the food goes into the abomasum where digestion is completed.

CATTLE

Cattle were first domesticated 9,000 years ago in Southern Eurasia. Adults can weigh as much as 2,000 pounds. A baby is called a calf, a young female is a heifer, an adult female is a cow, and an adult male is a bull. Horns grow on cows and bulls in most breeds but the horns are often cut off when the cattle are young. Cattle are herbivores, they eat only plants and have no upper front teeth. A cow starts producing milk only after her first calf is born. Dairy cattle are milked twice a day producing about five gallons of milk. Along with producing milk and its by-products (cheese, yogurt, butter) and meat (from beef cattle) they are also used as draft animals in some parts of the world, pulling carts, plowing fields, and carrying loads.

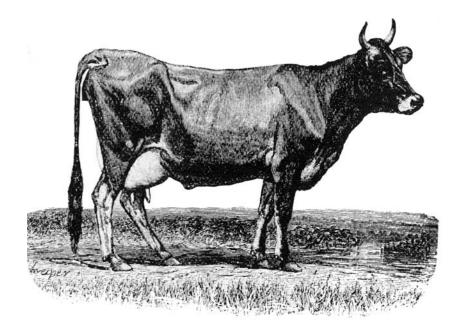
SHEEP

Sheep were domesticated approximately 11,000 years ago. Most modern breeds originated from the Middle East and Western Asia. There are many varieties of sheep, which range in size from 150-300 pounds. Young sheep are called lambs, an adult female is a ewe, and an adult male is a ram. Sheep are herbivores, eating pasture grass, weeds, shrubs, grains, and hay. Only the lower jaw has front teeth so sheep must tear pasture grass by jerking their heads forward and up. Approximately 60% of sheep are raised for food production. The other 40% are raised for wool, which is made into yarn for clothing, carpets, and upholstery. Sheep that are bred for their wool have been selected for the presence of a plush long undercoat, which grows year round.



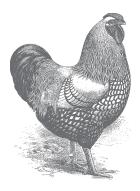
GOATS

Goats were domesticated approximately 10,000 years ago in the Middle East and Western Asia. Adults can range in size from 140 to 190 pounds. A baby goat is called a kid, an adult female is called a doe, and an adult male is called a buck. Both does and bucks have horns. Goats are browsers, meaning they eat a large variety of plants. Goats provide many useful products for humans. Goat's milk is consumed worldwide more than the milk of any other domesticated farm animal.



CHICKENS

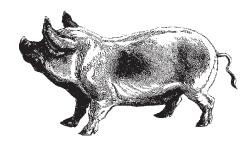
Most of the 200 domesticated breeds of chickens are descendants of the Red Jungle Fowl of India. A young chicken is called a chick, an adult female is a hen, an adult male is a rooster, and a group of chickens is called a flock. Chickens are categorized in two sizes: bantam and large, bantam being 30% smaller than large chickens. Hens start laying eggs at about six months of age, with an average of 4-5 eggs per week. Their feet have sharp claws which they use to scratch for food or to hang



onto branches. The **comb** is the decorative feature on the top of the chicken's head. The **wattle** dangles under the bird's chin. Chickens are **omnivorous**, eating insects, grains, grass, and weeds. They have sharp beaks for pecking grains and seeds. Their food goes into a pouch at the base of the neck called the **crop**. The food then passes into the **gizzard**, where it is ground up for digestion. Chickens use small pebbles or are fed grit or ground oyster shells to aid in the digestion of food.

Hens lay eggs year round, but lay fewer from autumn through winter. Eggs come in a vari-

ety of sizes and colors depending on the breed of chicken. You can watch a chicken clean itself by fluffing dust into its feathers. Chicken manure makes great fertilizer.



SWINE

All domesticated swine (pigs) are descendants of one species, the wild boar (Sus scrofa) originally found in Europe, Asia, and North Africa. Swine weighing less than 120 pounds are called pigs, greater than 120 pounds are called hogs. A baby pig is called a piglet, an adult female is a sow, and an adult male is a boar. Pigs grow faster than any other farm animal, reaching adult size (up to 800 pounds) in one year. Pigs are omnivorous, eating just about anything. They use their snout (nose) to dig in the soil looking for food. The snout is tough cartilage containing sensitive smelling pores. Pigs cannot regulate their body heat by sweating because of a thick subcutaneous fat layer and relatively hairless skin. They cool themselves by wallowing, making a bed in moist dirt or mud which wets their skin.

Ardenwood's farm animals represent a small sample of all the varieties that have been domesticated for human use. We hope you have enjoyed your visit with them today.

Remember, farm animals, like our pets at home, depend on us for good care, while we depend on them for food, clothing, and labor.

If you have any further questions about farm animals, contact an East Bay Regional Park District Naturalist at one of the following Visitor Centers:

ARDENWOOD HISTORIC FARM 34600 Ardenwood Boulevard Fremont, CA 94555 (510) 796-0663 awvisit@ebparks.org

TILDEN NATURE AREA/EEC and LITTLE FARM Berkeley (510) 525-2233 tnarea@ebparks.org

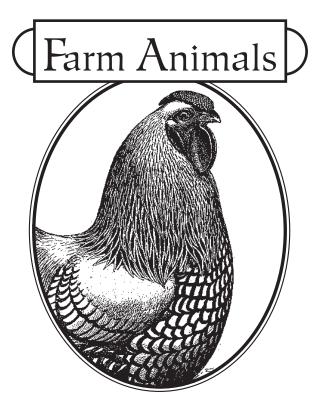
Illustration of goat by Jessica Sheppard Text by Gaeta Bell

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Ardenwood Historic Farm

