

# FRESNO COUNTY PRODUCTS

## 1. COTTON

Fresno County and the San Joaquin Valley raise fine cotton. Cotton is one of the most important crops in Fresno County. Cotton is used for making clothes and for many other things.

Fresno has a good climate for growing cotton. The soil is good and there is plenty of land. There is water to irrigate the cotton.

Cotton seeds are planted in spring. They are planted close together in the rows. When the plants are about six inches high the cotton is chopped. The choppers thin out the extra plants and the weeds that have started to grow. The plants that are left are about 10 to 14 inches apart. Later the farmer uses a cultivator to get rid of the weeds and keep the soil loose.



To grow a good crop of cotton the plants need to be fertilized and watered several times during their growth. The plants also need to be sprayed or dusted to get rid of harmful insects.

When the plants are about three feet tall, white flowers can be seen on the plants. After a few hours the flower turns pink. The bloom falls off the next day and leaves a tiny cotton boll. This boll is a little pod. It has seeds beginning to grow inside it. Little damp fibers grow from these seeds and fill the boll. When the boll is ripe, it opens and looks like a snowball. Cotton can be picked by hand but most is now picked by machine. The cotton is cleaned at the mill and the seeds are removed. Spinning will turn the cotton into thread.

A cotton fiber looks like a flattened, twisted tube. The many little twists in the fiber are important. They help hold the fibers together when they are spun into yarn or thread. A cotton fiber is actually as strong as a steel wire of the same thickness.

Cotton is used for many things. Cotton is woven into cloth. Cotton cloth is used for making clothes, curtains, towels, sheets, and many other things.

The seeds of the cotton plant are crushed to get the oil out. This is used for cooking. The seeds are used for animal food.

## 2. ALFALFA

Alfalfa, a member of the pea family, is cultivated extensively as food for cattle and horses. It is grown in large irrigated fields and is a hardy plant, adaptable to most climatic and soil conditions. Alfalfa is considered a soil building crop, since it returns nitrogen to the soil, but it may also deplete the soil of certain other elements.

## 3. ORANGES

Oranges, a citrus fruit, probably came from China or India. They need a warm climate and Fresno provides that need. Oranges are a nutritious fruit containing vitamins A, B, and C, sugar, citric acid and mineral salts. They have a thick rind, are divided into segments, and are filled with juicy pulp.

The orange tree is an evergreen and is planted in groves for commercial purposes. The trees usually bloom in spring with sweet smelling blossoms. The fruit can range from pale to very bright orange in color. Oranges can take from 8 to 15 months to ripen. Trees are about 20 feet in height, and can bear fruit for 50 years.

## 4. ALMONDS

The almond is one of the oldest and best-known edible nuts. Almonds grow best where there are long hot summers and mild, but not warm, winters. The nut harvest is largest when the rainfall during the season is low and the trees are properly cultivated and watered.

There are two kinds of almonds, the sweet and the bitter. It is the sweet almond that is used for food. The oil of bitter almonds is used for a food flavoring. The shells of almonds are called hard, soft, or paper shells. The paper-shelled almonds are especially popular.

## 5. PEACHES



The peach originated in China thousands of years ago. It has a thin outer skin, a soft juicy pulp, and a single seed in the center. Peaches are grouped as freestone or clingstone. Freestone peaches have a pit that easily breaks away from the flesh. The pits in clingstone peaches are firmly attached to the flesh.

Peaches are not grown straight from seed because the fruit of a tree grown from seed may be very different from the fruit of the parent tree. Instead the trees are budded onto a root stock. Peach trees are more heavily pruned than other fruit trees because the color of the fruit improves with the amount of light that reaches it. The young peach trees are usually pruned into the shape of a vase or bowl.

## 6. TOMATOES

The tomato is a native to South America. They grow best in a warm climate with plenty of sunlight. They are easily killed by frost. If the temperature is warm and the sky is sunny, the tomato will thrive in almost any kind of soil.

Probably no other fruit has as many uses as the tomato. It can be served raw, stewed, baked, fried, or in meat dishes. Tomatoes are made into soups, juice, catsup, relish, pickles, sauces and paste. Tomatoes are an excellent source of vitamins A and C.

## 7. LIVESTOCK



Livestock are domestic animals raised for their working ability or for their value as a source of food and other products. The animals raised in greatest number in the Fresno area include beef and dairy cattle, horses, sheep, hogs, chickens, and turkeys.

Livestock came to Fresno County with the earliest settlers. The soil, climate and availability of food have all contributed to the growth of this industry. Today livestock are as important to our livelihood as they were to the early settlers and maybe even more so.

## ANIMAL FACTS

### GOATS

- |    |           |                                         |
|----|-----------|-----------------------------------------|
| 1. | Buck      | Is a male goat                          |
| 2. | Doe       | Is a female goat                        |
| 3. | Wether    | Altered male goat                       |
| 4. | Kid       | A goat under the age of 6 months        |
| 5. | Kidding   | Giving birth to their young             |
| 6. | Udder     | Milk gland, where their milk comes from |
| 7. | Gestation | Five months                             |



The goat is part of a very large family of animals called "RUMINANTS". The special name that they have is due to the make up of their stomach. Animals in this class are very different than any other animal. They have four stomachs and have no teeth on the upper jaw. Many times as you walk through the barns you will see these animals chewing their "Cud".

The "Cud" is re-chewing of food. If you did not know what they were doing you may

mistake them for chewing gum. The reason that they have to re-chew their food is because of the special stomach. These animals spend most of their time chewing their food so that it can easily be digested.

The pigmy goat is only 18-20 inches tall. They also have one other very special feature, and that is that they only come in four colors. The colors are: Gray, Black, Cream and Agouti. So as you walk through please look for these special critters.

There are 6 breeds of goats:

1. Alpine Can be any color with erect ears
2. Togenburg Brown, white stripes on face with erect ears.
3. Oberhasli Red brown with black stripes on face and erect ears.
4. Saanin White only, no other colors allowed with erect ears.
5. Niobean Any color with long pendulous ears with a roman nose.
6. Lamancha Any color with very short ears, there are two types of ears, the very, very short ears are called "gopher" ears and the longer ones are called "cookie ears. This is the only breed developed in the United States.

We have Alpines, Lamanchas, nubians, Togenburgs, and Saanins in the barn. Most births are usually twin or triplets. Though singles and quadruplets are common. This is called a litter. Goats give milk for human consumption and to make cheese, ice cream, and yogurt to name a few things. Kids weight about 5 pounds at birth.



## SHEEP

1. Ram Is a male sheep
2. Ewe Is a female sheep
3. Lamb Is a young animal either sex
4. Wether Is an altered male
5. Sheep are raised for both meat and wool.
6. We shear sheep to harvest the wool. This is done once a year.
7. Gestation period is four months.
8. Twins and single births are normal. Triplets are less common.
9. When a ewe has a baby we call that lambing.
10. Sheep are born with long tails which are sometimes docked before they develop any nerves.
11. White face breeds are usually wool breeds. Black face breeds are usually

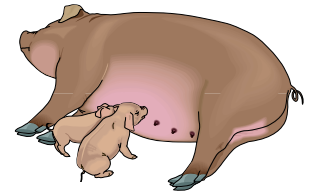
used for meat.

12. Sheep are ruminants having 4 stomachs and chew a cud.
13. A cud is food which is being chewed a second time after being held in the first stomach.
14. Wool breeds are: Ramboulliet, Cheviot, Dorset, and Columbia . Sheep usually considered meat breeds but which do produce a fine grade of wool are Corriedale, Suffolk, Southdown and Hampshire.



## SWINE

1. Swine Also referred to as pigs or hogs
2. Herd A group of swine
3. Boar Is a male hog.
4. Sow Is a female hog.
5. Pig Is a very young pig, either sex.
6. Gilts Young female animals.
7. Barrow Altered male.
8. Used for meat Bacon, ham, sausage.
9. Hogs Come in many different colors: all white, all red, all black, black with 1 or 2 white front legs plus a belt of white, and white with black or red spots.
10. Pigs are shown with a cane and loose in the ring
11. The notches in some of the ears designates what farmer they belong to.
12. Gestation period is three months, three weeks.
13. A pig usually weighs about two pounds at birth.
14. 10-12 in each litter.
15. When a sow gives birth we call that farrowing.
16. Pigs are one of the cleanest animals in the barn.
17. Pigs have a simple stomach, like man, and eat bakery waste (bread, rolls, etc.), barley, beans, carrots, beets, turnips, oats, peanuts, potatoes, rice, sunflower seeds, heat, and some ground alfalfa.



## CATTLE

1. Bull Is a male, any age
2. Cow Is a female which has had a calf
3. Calf Is a male or female less than six months of age
4. Steer A castrated male ( removal of testes)
5. Heifer A female which has not yet given birth to an offspring
6. Cattle are raised primarily for meat and milk.
7. Gestation period is nine months.
8. Single births are the norm, but the birth of twins occur occasionally.
9. When a cow has a calf it is called calving.
10. Bull calves are usually castrated unless kept for future breeding purposes.
11. Major breeds such as Hereford, Angus, Shorthorn, Brahman and Charolais are often crossbred, as well as lesser known breeds.
12. Cattle are ruminants and chew a cud.
13. A cud is food which is chewed a second time after being held in the first stomach.

The following is a partial list of the more common known beef breeds: Hereford, Angus, Charolais, Brahman, Gelviah, Beefmaster, Simmental and Shorthorn.

Dairy breeds: Holstein, Guernsey and Jersey are the most common in this area, but there are many other breeds raised here.

## EXAMPLES OF THE MANY AND VARIED USES OF BEEF



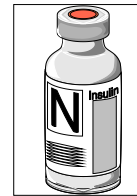
- |                 |                               |                            |
|-----------------|-------------------------------|----------------------------|
| 1. Candle       | 13. Plastics                  | 23. Boots & shoes          |
| 2. Cellophane   | 14. Shoe cream                | 24. Bandages               |
| 3. Ceramics     | 15. Shaving cream             | 25. Wallpaper              |
| 4. Cosmetics    | 16. Soaps                     | 26. Sheetrock              |
| 5. Crayons      | 17. Textiles                  | 27. Emery boards           |
| 6. Deodorants   | 18. Pet foods                 | 28. Glues                  |
| 7. Detergents   | 19. Floor wax                 | 29. Artist's paint brushes |
| 8. Insecticides | 20. Horse & livestock<br>feed | 30. Photographic film      |
| 9. Insulation   | 21. Leather sporting<br>goods | 31. Combs                  |
| 10. Linoleum    | 22. Luggage                   | 32. Imitation ivory        |
| 11. Perfumes    |                               | 33. Piano Keys             |
| 12. Paints      |                               |                            |

## BEEF BY-PRODUCTS FOR MECHANICAL TYPES OF USES

1. Hydraulic brake fluid.
2. Airplane lubricants and runway foam.
3. Various machine oils and viscous fluids.
4. Steel ball bearings containing bone charcoal.
5. Car polishes and waxes.
6. Textiles for car upholstery.

## PHARMACEUTICAL USES OF BEEF

- |     |                           |                                        |
|-----|---------------------------|----------------------------------------|
| 1.  | Insulin                   | For diabetes                           |
| 2.  | Pancreatic                | Aids digestion                         |
| 3.  | Glucagon                  | Treats hypoglycemia                    |
| 4.  | Tyrosine and Chymotrypsin | For burns and wounds                   |
| 5.  | Bone Marrow               | For blood disorders                    |
| 6.  | Soft Cartilage            | For plastic surgery                    |
| 7.  | Bone Meal                 | Calcium and phosphorus source          |
| 8.  | Blood Plasma              | For hemophilia and kills some viruses  |
| 9.  | Blood Albumin             | RH factor types                        |
| 10. | Trombin                   | Blood coagulant                        |
| 11. | Iron                      | For anemia                             |
| 12. | Intestines                | Medical sutures                        |
| 13. | Prolactin                 | Promotes lactation                     |
| 14. | Pressor Hormone           | Regulates blood pressure               |
| 15. | Vasopressin               | Controls intestinal and renal function |
| 16. | ACTH                      | For arthritis and allergies            |
| 17. | Heparin                   | Anti-coagulant                         |
| 18. | Liver Extract             | Treatment of anemia                    |
| 19. | Vitamin B-12              | Prevention of B-complex deficiencies   |



**99% OF EVERY BEEF ANIMAL IS USED FOR BEEF AND BY-PRODUCTS**

## RABBIT



Many of us think of Peter Cottontail when we see a rabbit but the Cottontail is only one breed in the rabbit world. They range in sizes from large to small. Rabbits are used for many things, their meat as well as their fur.

1. Buck Is a male rabbit
2. Doe Is a female rabbit
3. Junior Is a young rabbit under 6 months
4. Intermediate Is a rabbit at the age of 6-8 months
5. Senior Is a rabbit older than 6 months
6. Fryer Is used for meat 10 weeks of age

