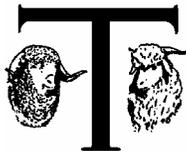


Learning About Goats

Secondary Level Packet



Sponsored By
Texas Sheep & Goat Raisers' Association



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Learning About Goats

Introduction

Goats may have been one of the earliest hoofed animals domesticated. People have been keeping tame goats since about 6,000 to 7,000 BC. Early explorers kept goats on ships to provide milk and meat on long voyages. Dairy goats were brought to the New World to provide early settlers with milk. The wild ancestors of domestic goats were probably the bezoar goats, animals of steep hills and mountainsides in Asia Minor. Later, domesticated goats spread to North Africa and southern Europe. The lands they inhabited were either hot and dry, or cold and barren with few plants. From these wild ancestors goats have inherited two major traits. They are very agile and sure-footed, and they will eat almost any kind of plant material.



Goat Basics

Goats are even-toed, hoofed animals. They are cud-chewing animals with a four compartment stomach. Animals of this kind are called **ruminants**. They have hollow horns that are directed upward, backward, and outward. Male goats have beards. They are extremely agile animals with a very good sense of balance. Domesticated goats frequently engage in jumping and climbing games with their herd-mates.



Goats live in groups called **herds**. A male goat is referred to as either a **buck** or a “billy” goat. Female goats are called **does**, or “nanny” goats. Baby goats are referred to as **kids**. Most breeds of goats give birth to a single kid, but twins or even triplets are common in some breeds. A kid can stand on its own within minutes of birth, and can move with the herd within a few days.

Goats are adapted to living in rough, dry, mountainous types of habitats where other livestock or crops cannot be grown. **Predators** such as mountain lions, coyotes, bobcats, golden eagles, and even domestic dogs prey on goats, particularly young kids. Often, specially trained guard dogs, and even guard donkeys help protect the goats from predators.

Just about any kind of plant material will serve as **forage** for goats. They will eat grass as well as broadleaf plants called **forbs**. Another food source are the leaves, twigs, and stems of woody plants commonly called **browse**. Depending upon the climate, goats will eat bitter desert plants and lichens. And while it’s not true that goats eat tin cans, they will eat the labels off the tin cans. It is this ability to utilize any kind of plant material for food that makes goats so useful in controlling unwanted vegetation.



Meat and Dairy Goats

There are many different kinds of goats raised around the world. Primarily goats are raised either for the food they provide, or for their hair. Goats raised as dairy goats include the Alpine, LaMancha, Nubian, Oberhasli, Toggenburg, and Saanen breeds. Goat's milk is very nutritious, easy to digest, and used to make many different kinds of cheese.

The main breeds of goats raised for meat production in Texas are the Spanish and the Boer goats. Goat meat is very low in fat and cholesterol. For over 80% of the people in world, goat meat is the meat most often consumed on a regular basis.



Fiber Goats

Some goats are raised not for their meat or milk, but for their hair. There are two kinds of goats raised for their hair, the Angora goat, and the Cashmere goat. While all goats have hair, the hair from these two breeds is particularly soft, warm, luxurious and sought after.



Angora goats are believed to have originated in the Himalayan Mountains of Asia. From the middle ages through modern times these goats have been highly prized for their hair, called **mohair**. This soft, luxurious fiber is woven into fine apparel. The goats have their hair clipped, or **sheared** twice a year. Angora goats are raised in Texas, Utah, Arizona, and New Mexico, although most come from Texas. Over 90% of the mohair production in the

United States comes from Texas. This accounts for over 50% of the world's mohair production.

Cashmere goats are the other fiber producing type of goat. Most of these goats come from Afghanistan, Iran, Outer Mongolia, India, and China. The fiber from these goats is also very soft, warm, and luxurious.

Goats and the Environment



Because goats will eat just about any type of vegetation, they are increasingly being used to control unwanted vegetation. Leafy spurge, an **exotic species** of weed poisonous to many types of animals, is taking over **range** land in many parts of the western United States. Tall whitetop, also known as perennial pepperweed, is another invasive plant goats are being used to help control.

In Texas, landowners are using goats to control brush, particularly cedar. Cedar re-growth in fields crowds out native grasses and depletes the groundwater supply. Current research has even determined that certain goats have a genetic preference for cedar. Goats help to control this re-growth and

enhance the amount of water percolating into the ground.

By using goats to eat these invasive plants, landowners are helping the environment by removing the plants that are crowding out beneficial species. In addition, they do not have to use **herbicides** to kill the plants. Herbicides are very expensive, so ranchers are also saving money while helping the environment when they don't have to use them to control noxious brush.

Goats can be pastured with sheep and cattle because each species prefers different plants. While they will eat grass, goats prefer brush, tree leaves and rough browse plants. Cattle and sheep prefer grass. It has even been shown that when properly rotated, goats can actually improve the palatability of plants for many species of wildlife such as deer.

Products from Goats

We get many other products from goats besides meat, milk, and fiber for clothing. Hides are used as rugs, and the skin is used for fine leather. Gelatin, fertilizers, surgical supplies, medicines, soaps, ceramics, pet foods, horn and bone handles, luggage, and footwear are just a few of the other products we get from the natural, renewable, and Earth-friendly GOAT.





Learning About Goats

Study Questions



Answer the following questions. Be sure to use complete sentences.

1. How long have people been keeping domesticated goats? Where do we think goats originated? _____

2. What two major traits have domesticated goats inherited from their wild ancestors? _____

3. Describe a goat. _____

4. What type of diet do goats have? _____

5. For what two basic products are goats primarily raised? _____

6. Why is goat meat good for you? How many people in the world eat goat meat? _____

7. What two kinds of goats are raised for their fiber? _____

8. Where does most of the mohair production come from? How much is it? _____

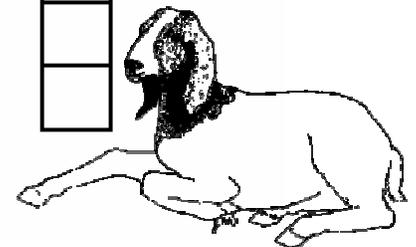
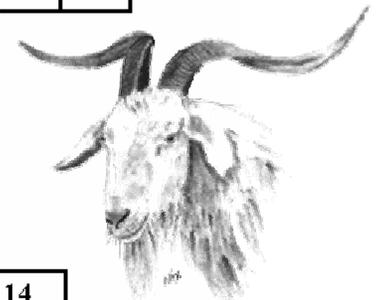
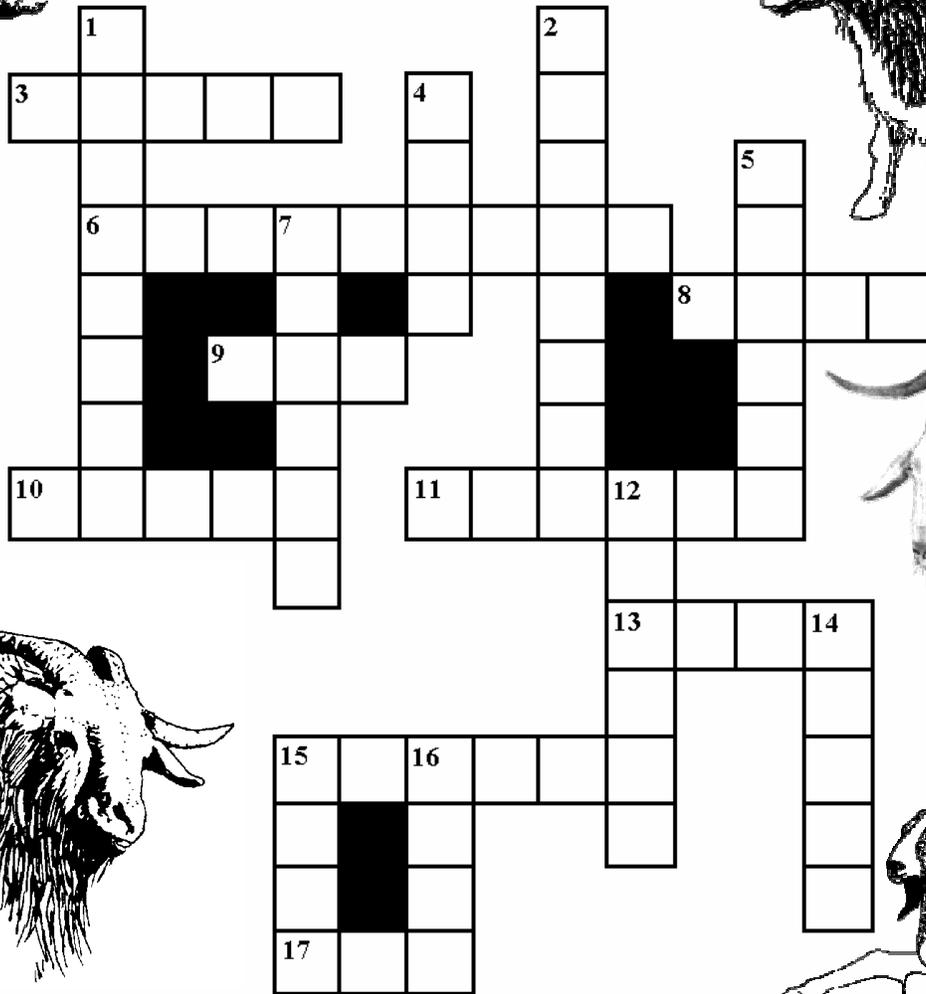
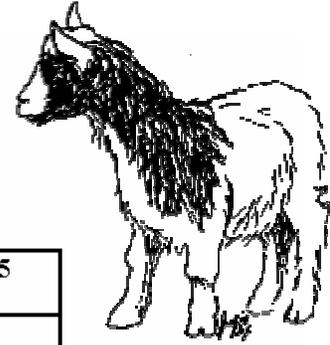
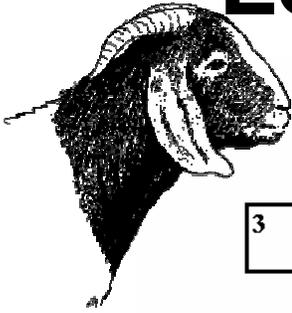
9. Give two examples of where goats are being used to benefit the environment. _____

10. Why do ranchers prefer not to use herbicides if they don't have to? _____

11. What other products do we get from goats? _____

Learning About Goats

Crossword Puzzle



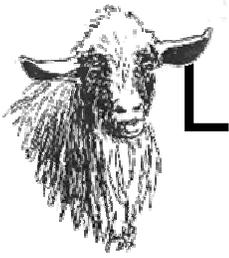
Across:

3. Countryside over which grazing animals roam.
6. Chemical used to kill or control unwanted vegetation.
8. Food product from goats
9. Female goat
10. State that produces the most mohair
11. Plants that animals use for food
13. Animal that provides people with food and fiber
15. Fiber that comes from Angora goats
17. Baby goat

Down:

1. Short, soft, down-like fiber from goats.
2. Animal that hunts and kills other animals for food.
4. Male goat
5. Food made from goat's milk
7. Vegetation such as leaves and twigs.
12. Mohair comes from this goat
14. When more than one kid is born
15. Food from goats
16. Group of goats





Learning About Goats

Glossary

Angora: The type of goat that produces mohair.

Billy goat: Another name used to refer to a male goat.

Buck: A male goat.

Browse: Vegetation such as leaves, twigs, and stems of woody plants.

Cashmere: The short, soft, down-like fiber from goats used to make expensive and luxurious types of clothing.

Doe: A female goat.

Exotic Species: A species of plant or animal that is not native to an area.

Fleece: The coat of hair that is removed from a goat when it is sheared.

Forb: Broadleaf plant that has webbed veins.

Forage: Plants that animals use for food. Goats prefer plants often referred to as weeds.

Herbicide: A chemical used to kill or control unwanted vegetation.

Herd: A group of goats. Also means to gather animals together into a group.

Kid: A baby goat.

Mohair: The fine fiber used most often in clothing that comes from angora goats. Texas produces 90% of the mohair in the U.S.

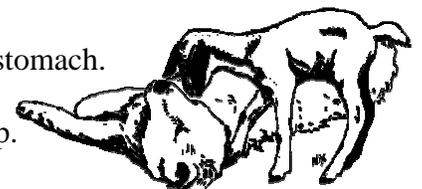
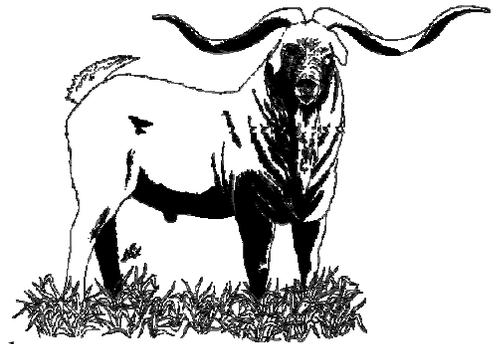
Nanny goat: Another name for a female goat.

Predators: Animals such as coyotes, wolves, mountain lions, bobcats and domestic dogs that hunt other animals for food.

Range: The countryside over which goats and other types of grazing animals roam.

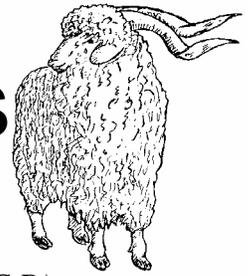
Ruminant: A hoofed, cud-chewing animal with a four compartment stomach.

Shearing: The process of clipping the coat of hair from goats or sheep.





Learning About Goats



Answer Key

TEKS Correlation:

§112.22 6.2(C), 6.3(B)(C)(D)(E), 6.8(C), 6.12(C) §112.23 7.3(B), 7.5(B), 7.12(A,B,C,D), (7.14)B,C §112.24 8.3(B), 8.6(C), 8.11(A,B), 8.14(B,C), §112.43(3)B; (12)B,C,E; (13)A §112.44 (3)B,C; (4)C,D,E; (5)C,E,F; (8)C

Study Questions

1. People have been keeping domesticated goats since 6000 to 7000 BC. Domestic goats probably originated in Asia Minor.
2. The two major traits that goats inherited from their wild ancestors are that they are very agile and sure-footed, and they will eat just about any kind of plant material.
3. A goat is an even-toed, hoofed animal called a ruminant, which means it chews its cud and has a four compartment stomach. They have hollow horns that grow upward, backward, and outward.
4. Goat will eat any kind of plant material. They will eat grass, forbs, and browse.
5. Goats are raised primarily for the food they provide, or for their hair.
6. Goat meat is low in fat and cholesterol. More than 80% of people in the world eat goat meat on a regular basis.
7. Angora goats and Cashmere goats are raised for their fiber.
8. Most mohair production comes from Texas. It is 90% of the U.S. production, and 50% of the world production.
9. *Answers will vary.* Goats are benefiting the environment by being used to control noxious plants such as leafy spurge, and tall whitetop. They are also being used to control brush such as cedar, which not only crowds out more desirable grasses, but also depletes groundwater. By using goats to control unwanted vegetation, fewer herbicides are needed to do the same job the goats are doing for free.
10. Rancher are like everyone else, they do not want to use anything they do not have to use. Herbicides are very expensive and using them makes their production costs go up.
11. Besides milk, cheese, meat, and fiber, we also get rugs, leather, gelatin, fertilizers, surgical supplies, medicines, soaps, ceramics, pet foods, horn and bone handles, luggage, and footwear.

Crossword Puzzle

Across

3. range
6. herbicide
8. meat
9. doe
10. Texas
11. Forage
13. Goat
15. Mohair
17. Kid

Down

1. Cashmere
2. Predator
4. Buck
5. Cheese
7. Browse
12. Angora
14. Twins
15. Milk
16. Herd

