

# Ranchers and Cattle Drives

## History Facts/Reading:

Power Point

Program Theme Report

## Geography Maps:

### The Old Chisholm Trail

1. In what northern town did the Old Chisholm Trail end? Abilene, Kansas
2. What three states did the Old Chisholm Trail go through? Texas, Oklahoma, and Kansas
3. At what southern ranch did the Old Chisholm Trail begin? King Ranch
4. Name three cities that were built along a river. Answers will vary

### Cattle Trails and Railroads Map

1. Name four cattle drives that went through Texas. The Goodnight-Loving Trail, The Old Chisholm Trail, The Western Trail, and The Shawnee Trail
2. What southern Texas city did most of the trails begin or end? San Antonio, Texas
3. Name four states the trails lead to from Texas. Montana, Wyoming, Kansas, and Missouri

## Math:

Some ranchers had thousands of cattle they would move across the country in cattle drives.

1. If a rancher had 2,340 cattle and he wanted to sell half of them in Texas, a quarter of them in Kansas, and keep the rest, how many cattle would go to Texas? 1170 To Kansas? 585 How many would he keep? 585
2. An 8 year old male longhorn had horns that spread 8 feet and 6 inches. His younger brother had horns that spread 6 feet and 3 inches. What is the difference in their horn length? 8 ft - 6 ft = 2 ft, 6 in - 3 in = 3 in, 2 feet and 3 inches difference
3. If you lined up three longhorn cattle whose horns spread lengths of 8 feet and 4 inches, 7 feet and 11 inches, and 4 feet and 9 inches, what is the combined length of their horns? 8 ft + 7 ft + 4 ft = 19 feet, 4 in + 11 in + 9 in = 24 inches, 24 in / 12 in = 2 feet, 19 feet + 2 feet = 21 feet

## **Vocabulary/Spelling:**

Remuda – the herd of horses from which those to be used for the day are chosen

Hides - The skin of an animal, especially the thick tough skin or pelt of a large animal

Endeavor – an activity intended to do or accomplish something

Sought – looked for

Distinguish – to set apart or show a difference

Trail - An overland route or path through woods or wilderness

Barbed wire – twisted strands of wire with pointed barbs at close intervals used to prevent passage

Divided – separated into parts or pieces

## **Science:**

In June of 1868, a very fatal disease had broken out among cattle in Illinois. Farmers soon found that the disease was associated with longhorn cattle driven in from south Texas. What was so odd was that the Texas cattle were healthy, but any cattle allowed to mix with them or use a pasture recently used by the longhorns became ill and died. Farmers called the disease Texas fever or Texas cattle fever because of its connection with Texas cattle.

To protect their cattle, states along the cattle trails passed quarantine laws routing cattle away from settled areas or restricting the passage of herds to the winter months, when there was less danger from Texas fever. In 1885 Kansas entirely outlawed the driving of Texas cattle across its borders. Kansas, with its central location and rail links with other, more northern markets, was crucial to the Texas cattle-trailing business. The closing of Kansas, together with restrictive legislation passed by many other states, was an important factor in ending the Texas cattle-trailing industry that had flourished for twenty years.

### **1. Why were the longhorns healthy and why did the other cattle become ill and die?**

In 1893 Theobald Smith and Fred Lucius Kilborne of the federal Bureau of Animal Industry in Washington, D.C., announced their isolation of the pathogen of Texas fever. They demonstrated that the disease is caused by a microscopic protozoan that inhabits and destroys red blood cells.

Besides identifying the microorganism responsible for babesiosis, the name they gave to the disease, Smith and Kilborne discovered that the disease was spread by cattle ticks. After sucking blood from an infected animal, a tick would drop off into the grass and lay eggs from which would hatch young ticks

already harboring the protozoan. Weeks after the original tick dropped from its longhorn host, its progeny were still capable of infecting other cattle.

**2. What is a microscopic protozoan?**

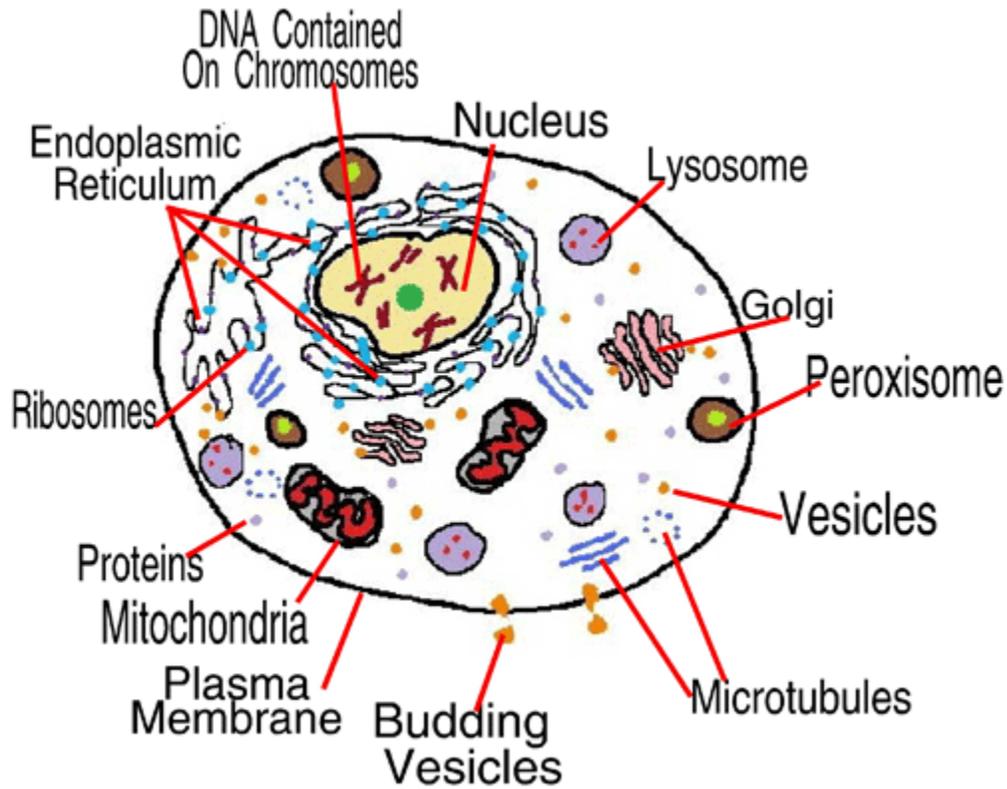
There are over 200,000 protozoan species and 10,000 are parasitic and live in invertebrate and vertebrate hosts.

- Parasitic – living off of another
- Host - The animal or plant on which or in which another organism lives
- Invertebrate – has no backbone
- Vertebrate – has a backbone

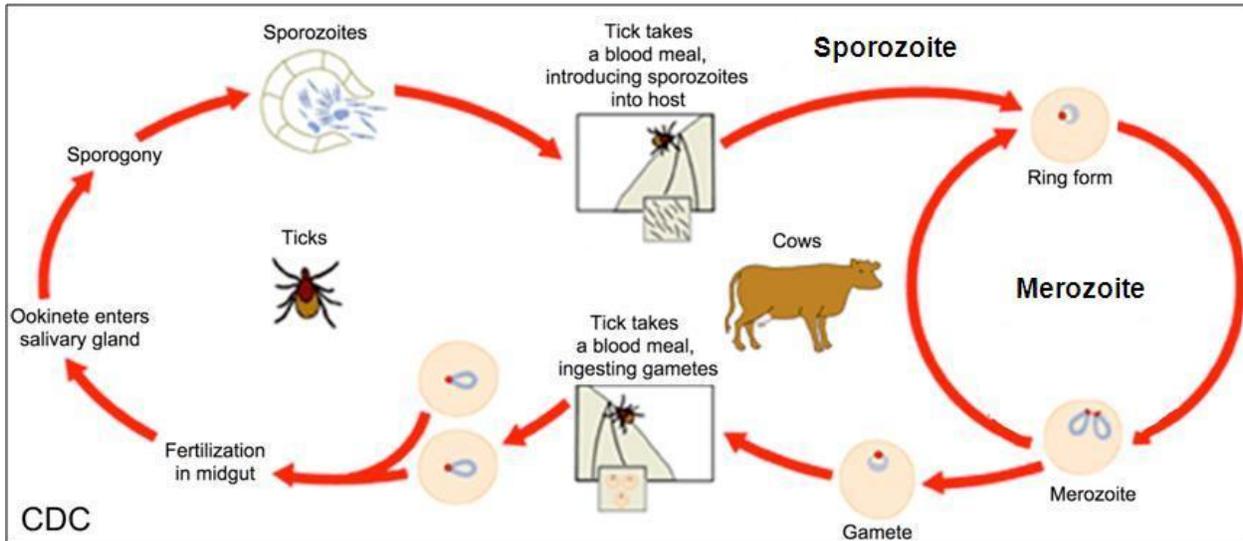
**3. The scientific classification for the Bovine Babesiosis that caused Texas Fever is:**

<b>Kingdom</b>	Eukaryota
<b>Phylum</b>	Apicomplexa (Sporozoa)
<b>Class</b>	Aconoidasida
<b>Order</b>	Piroplasmida
<b>Family</b>	Babesiidae and Theileriidae
<b>Genus</b>	Babesia
<b>Species</b>	bovis bigemina <i>** species infecting humans</i> canis divergens ** jakimovi major ** microti ** ovate

4. The Babesia protozoa are in Kingdom Eukaryota. A typical eukaryote cell structure is shown in the picture below.



For further exploration of the disease process.



## Life cycle of *Babesia*

