

**ELEMENTARY SCIENCE SECTION****MAN'S FRIEND, THE HORSE***Man's Friend*

FROM the earliest times of man's history we know that he used the horse, first as a source of food and later as an aid in war and a beast of burden.

The members of the horse family are especially interesting because scientists have been able to trace their history more completely than that of any other animal group. So many fossil skeletons of horses have been discovered, in all parts of the world, that we know the history of its development for 2,000,000 or 3,000,000 years.

The earliest ancestor of the horse was a tiny animal about the size of a cat, with five toes on each fore foot and four on each hind foot. These little animals began to run on the tips of their toes to escape their enemies. Gradually the center toes became stronger and the weaker toes finally disappeared.

That is why the horse now has only one toe on each foot. The hoof of the horse is just a greatly enlarged and thickened toe-nail. Traces of the lost toes may be found by examining a skeleton of a horse.

The horse has a well-shaped body, strong limbs, a long head, pointed ears which it can move, and wide-open nostrils. The hair is soft and short, and lies

close to the body, growing into coarse strands in the mane and tail.

The horse eats grass and grain but does not chew the cud, as does a cow. It has from 36 to 40 teeth. There is a division between the groups of teeth, an arrangement by which man has been able to subdue this vigorous animal by using a bit in its mouth.

The young of the horse is called a colt. The colt is born with its eyes open and its body fully covered with hair. It is able to stand and walk a few minutes after birth. Within two weeks the central

*An Arab and his Horse*

teeth make their appearance. Other teeth soon follow, and when the colt is about six months old it has a full set of the first teeth which are called milk teeth. These are shed during the third year. When the colt is five years old its set of permanent teeth is complete.

The growth and changes in appearance of the teeth are so regular up to the tenth year that the age of the horse may be judged by them, but after the tenth year these annual changes cease.

In prehistoric times the wild horse was first pursued for food. The first peoples to tame the horse lived on the great grasslands north of the Caspian and Black seas. (See a map of Eastern Europe.)

In ancient times the horse was used to draw chariots in war, and was not ridden. As beasts of burden the ox and the ass were used long before the horse.

When Europeans first went to America, the horse was entirely unknown to the American Indians. Horses were taken to America by the Spaniards and other people from Europe, just as they were brought to the Philippines. The wild horses and Indian ponies of North America and South America are descendants of horses that escaped from the Spaniards in the 16th century. The wild horses of Australia are descendants of horses taken there from Europe.

Of all the horses in the world today the Arabian steed is the ideal horse. It can run very fast, it has a graceful body, and is very intelligent and tame. (See the illustration on page 327.) The Arab loves and pets his horse as he does his child, and man and beast understand each other perfectly. The mother horse and her colt live in the tent with the Arab and his children.

The Egyptians used horses as early as 1500 B. C., and they were like modern Arabian horses. Horses were in use in Babylonia, Palestine, and Greece about the same time, but they were coarse, thickset animals. The horses used in Spain were introduced from Northern Africa. They were almost as famous as the Arabian horses.

The running race horses are descended from the Arabian horses and those from Northern Africa. The marvelous speed of race horses shows what can be done by careful selection and breeding.

Except in the very cold Arctic regions, the horse is distributed throughout the world. In Europe and North America horses are used as work animals, and are larger than the ponies of the Philippines. Since the common use of autos, horses are not used so much as in former days.

The small ponies of the Philippines are largely used to draw the two-wheeled *calesas* in common use. These horses, even if small, are strong and wiry. Although they are descendants of early imported horses, they have become so accustomed to the tropical climate that they have remarkable endurance even in the heat of the torrid zone.

The normal life of a horse is usually 18 or 20 years. The scientific name of the domestic horse is *Equus caballus*; from this comes the Spanish word *caballo*, and the Filipino name *cabayo*.

#### REVIEW QUESTIONS

1. Can you tell about the earliest ancestor of the horse?
2. How many toes did it have on the fore feet? On the hind feet?
3. Can you describe the horse's foot of the present time?
4. Can you tell about a horse's teeth?