

# The Evolution of the Modern Horse

By Mary Ellen Robertson, Burnside Pluckies 4-H  
Goodhue County, Grade 7

Part one

I cite the sources

[tomvangelder.anthrovista.com/evolution-of-the-horse-162m8l.html](http://tomvangelder.anthrovista.com/evolution-of-the-horse-162m8l.html)

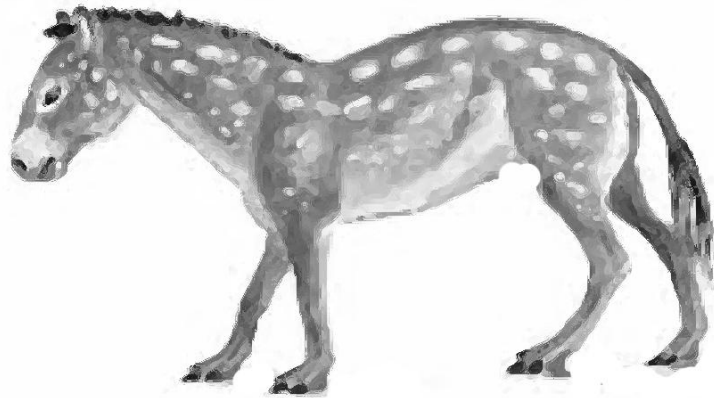
[www.britannica.com/animal/horse/Origin-of-horse-domestication](http://www.britannica.com/animal/horse/Origin-of-horse-domestication)

[www.world-archaeology.com/issues/issue-35/early-date-for-horse-domestication-in-kazakhstan/](http://www.world-archaeology.com/issues/issue-35/early-date-for-horse-domestication-in-kazakhstan/)

[biodiversity.ku.edu/archaeology/research/early-horse-herders](http://biodiversity.ku.edu/archaeology/research/early-horse-herders)

# Hyracotherium or Eohippus

The first horse ancestor was the size of a small dog what lived 55 million years ago and is the oldest ancestor of horses. The horse is called Hyracotherium or Eohippus or "Dawn Horse".



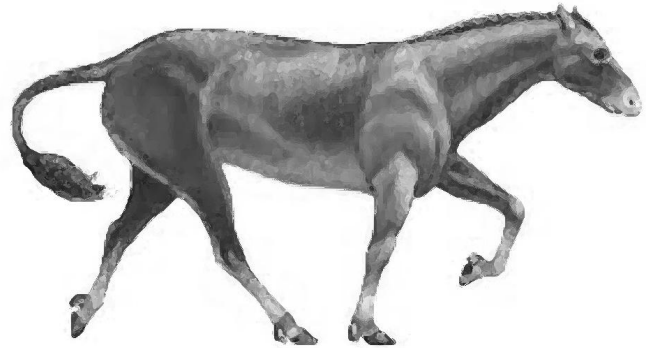
# Orohippus

The next horse was called orohippus. This horse still looked like a small dog but had a leaner body, longer head, longer hind legs, and slender forelegs. The change between Orohippus and Eohippus was their teeth and how Orohippus had premolars, which might be a clue that they could eat fibrous plants.



# Mesohippus

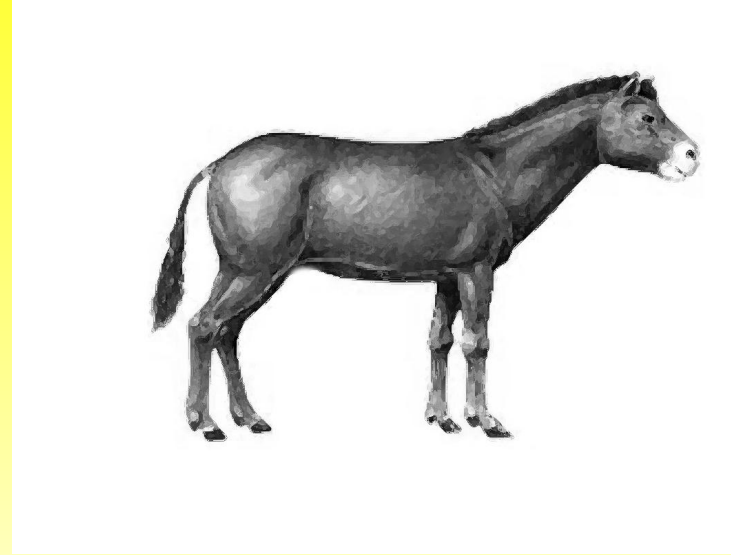
About 40 million years ago the climate changed in North America to a dry one and grass appeared. Mesohippus change from looking the size of a small dog to the size of a goat. The size of the shoulder height about 35 million years ago was 35 cm. Just by its long limbs Mesohippus is thought to have been an agile animal.



# Miohippus

Sometime around 28 million years ago  
Miohippus came around and for 4 million  
years Meshippus and Miohippus lived  
together. Miohippus was larger than  
Meshippus and had a larger head, plus the  
molars had an extra ridge.

There were many types of Miohippus --  
some lived in the forests and some stayed  
in the grasslands. The horses' ankle joints  
were different, too.



# The three lines

After Miohippus there were three lines:

- \*Three-toed browsers -- This horse was very heavy of the weight of 300 kg and tall in size.

- \*Small horses -- died out very fast.

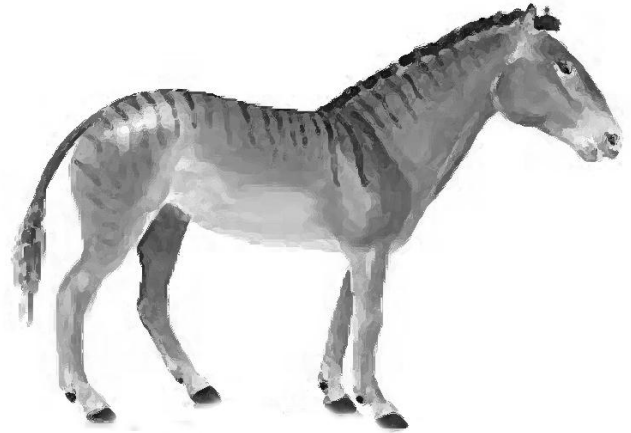
- \*Grass eaters -- These horses gave way to the modern horse.

# Merychippus

This horse looked more like a modern horse. What we know about horse lived 10 million to 12 million years ago.

Merychippus was a grasser and a fast runner, and having long legs.

Merychippus horses had a larger brain and their eyes pushed back farther. The horses had wider molars and a higher crown. The horse also had a layer of cement that was used for to chew hard grasses.





## Another three lines:

The next three lines of types of horses included:

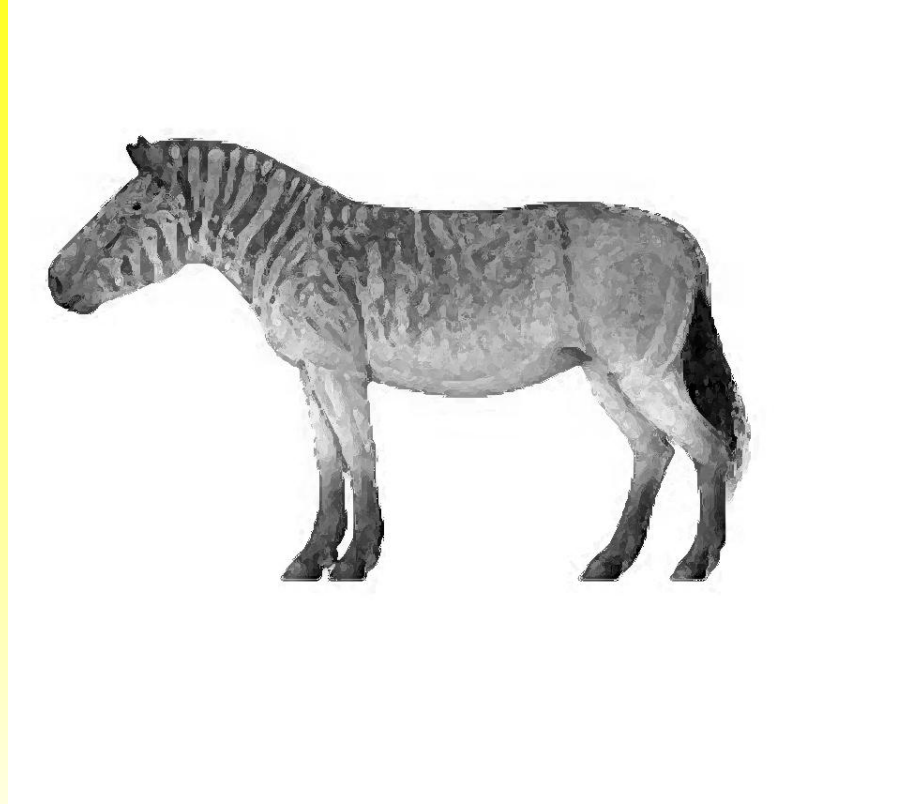
- \* Three toed horses---a mix of grass and browsers.

- \* Smaller horses

- \* Horses with a reduced number of toes or the "true equines".

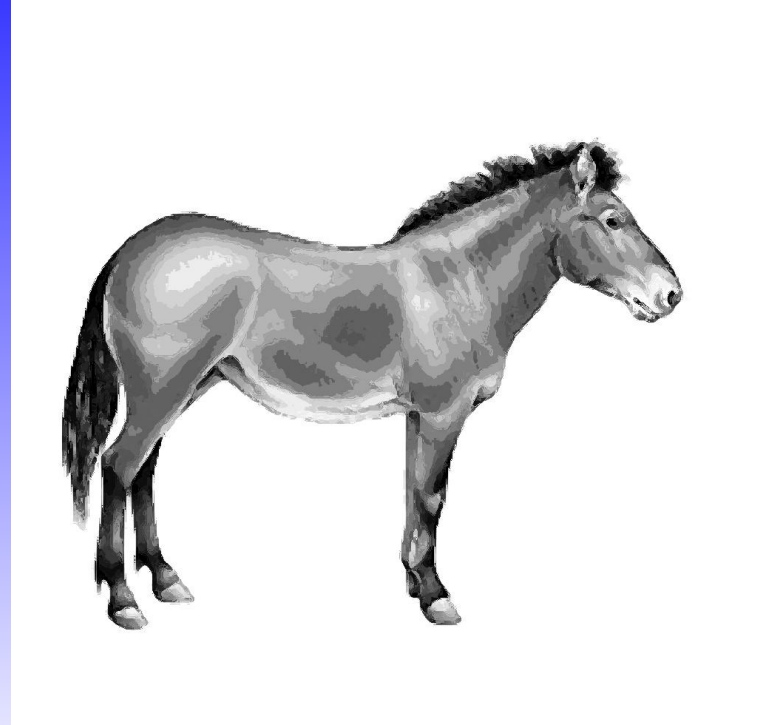
# Hipparion

A full fossil of Hipparion shows the size was larger than a small horse and slender like a gazelle. Hipparion adapted to live on the prairies. Hipparion had three toes and small hooves and the sides didn't touch the ground.



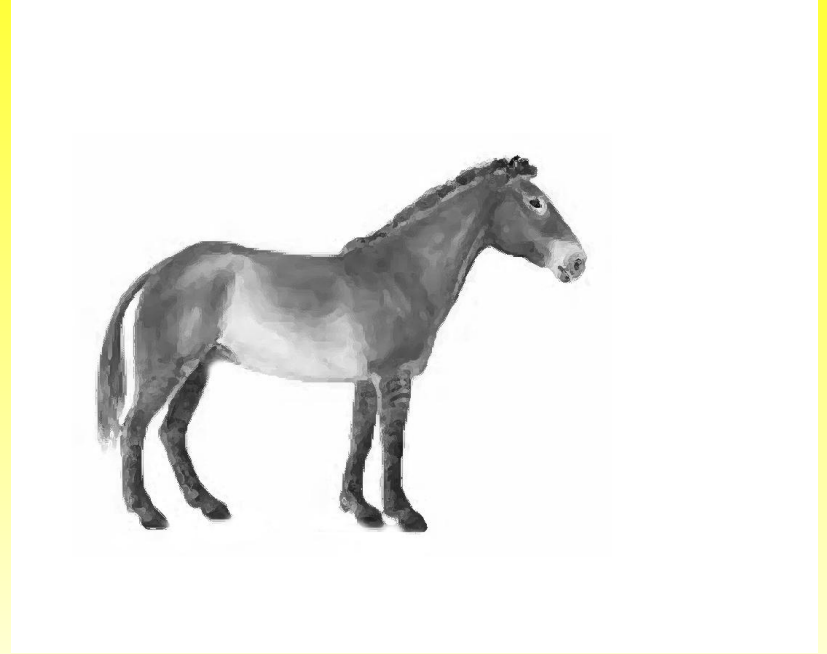
## A "true equine": Plihippus

Plihippus lived about 12 million years ago. The horse still had three toes, and looked more like a modern horse. Plihippus was fleet footed steppe animal. It was assumed that Plihippus was the nearest ancestor of the modern horse, but another horse is now the nearest ancestor even though these horses are related.



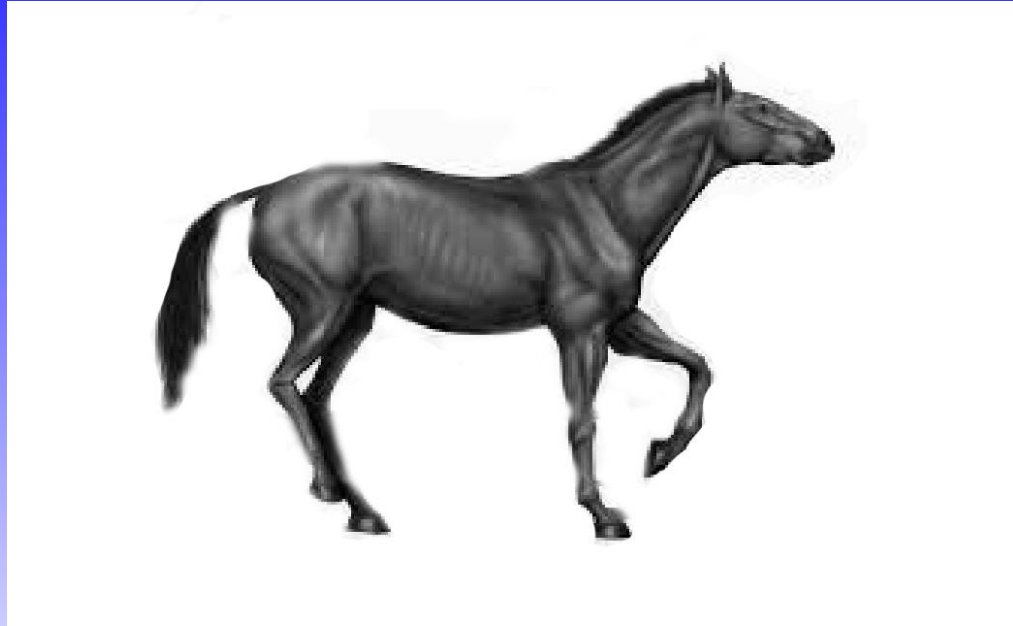
# Dinohippus

Dinohippus lived about 12 million years ago. It looked more like Equus found over time. This applies to the molars what grew to be straight. The legs evolved twice -- once in Pliohippus and again in Dinohippus.



# Equus

The types of horses of Equus had the head of a donkey and zebra-like body. These types of horses quickly populated the old world. Even though many horse species lived on the North America, after the ice age about 8,000 years ago the horses in North America died out. The old world horses didn't died out.



# The Domestication of the Horse

Part two

# Domestication of the horse in the old world

In the old world, zebras and donkeys didn't die out. In Kazakhstan and Ukraine or just across Eurasia, the people started to tame horses. The slow process started about 6,000 to 5,600 years ago.

# Horses in Kazakhstan

The people in the country Kazakhstan started to tame horses for their milk and riding. Kazakhstan is a country in Europe and Asia where people hunted wild horses for meat. This was done by the Botai people in the northern part of Kazakhstan.





# More about horses in Eurasia

The Botai people used their horses for their milk, riding, and for draft work as well. Work at archaeological site in north Kazakhstan where bones were found showed that the horses were being bred and the horses were bridled and harnessed. Horse manure was used for roofs of houses. Some of the best evidence of domestication is found of in Botai pottery which has traces of mare's milk.



# Summary

So in summary the domestication and evolution of the horse took 55 million years to become what we know today as people learned in history and discovery that over time the horse changed and how people got introduced and tamed horses that started 5,500 to 6,000 years ago.