

Category IV Notes for Natural Selection Examples

Representing Ideas Effectively

Material A, pp. 314-315t

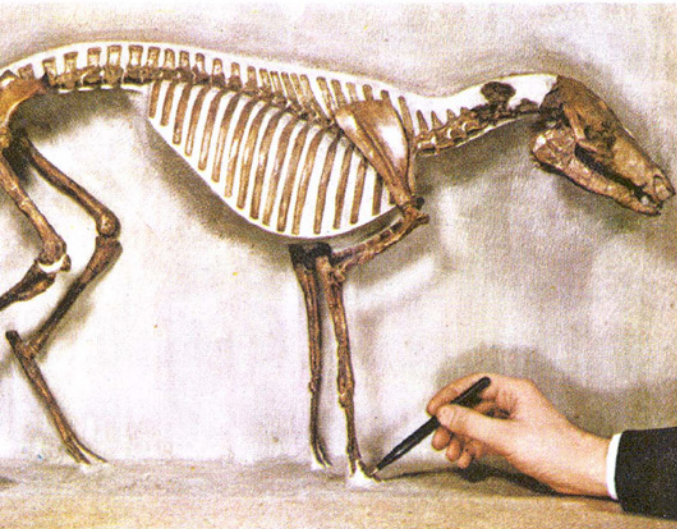
Represents key idea that “The basic idea of biological evolution is that the Earth’s present-day species developed (over many generations) from earlier, distinctly different species” (idea a).

From Abraham, N., Beidleman, R. G., Moore, J. A., Moores, M. and Utley, W. J. (1975). Interaction of Man & the Biosphere, Second Edition, Teacher’s Edition (pp. 314-315). Chicago: Rand McNally & Company.

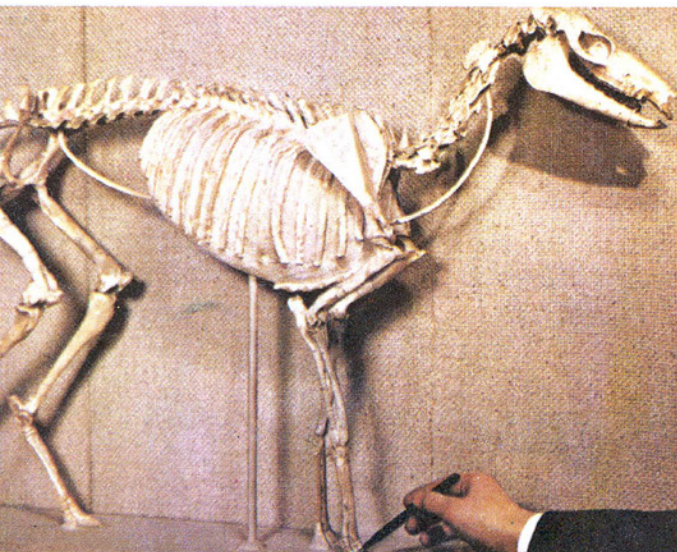
Figure 12 • 7.
Skeletons and
some artists'
reconstructions of
what early forms
of the horse may
have looked like.
The pictures
show some details
of front feet.
Notice how the
feet have changed
through time.

Evolution of the Horse

The best evidence for evolution comes from a series of fossils that show a trend from one sort of animal to another. Some of the most interesting evidence available concerns the horse. Scientists have discovered hundreds of thousands of fossils of early horses and now know at least the broad outlines of horse evolution. The story began about 70,000,000 years ago; some of the highlights are shown in Figure 12 • 7.

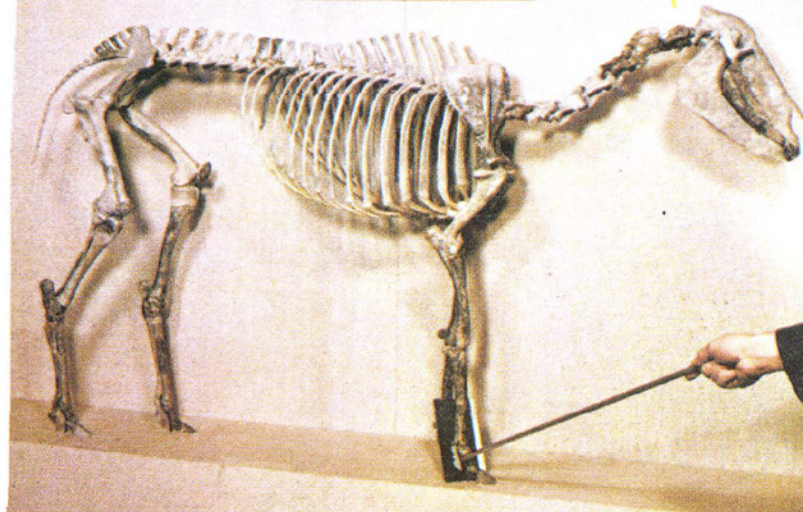


Eohippus lived about 50,000,000 years ago. It was about the size of a small dog, and four of its five toes on the front foot reached the ground.

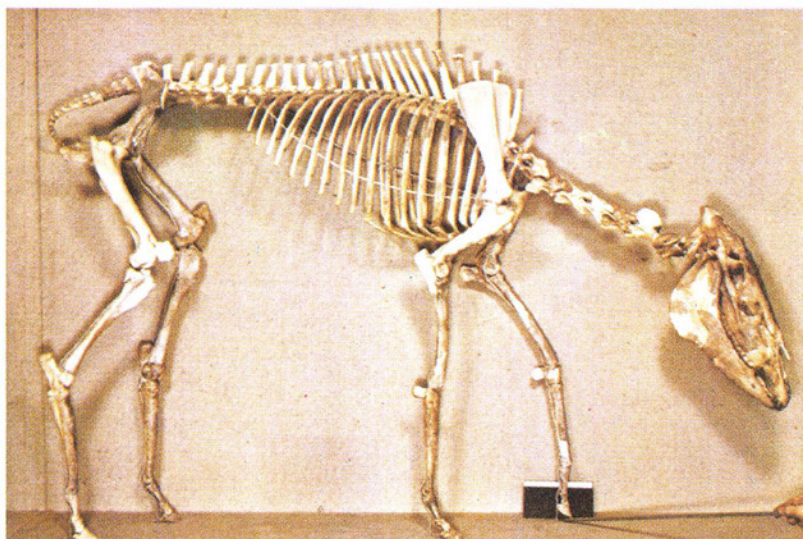


Meshippus lived about 35,000,000 years ago. This animal was about the size of a large dog. Each front foot had three toes that reached the ground.

Merychippus lived about 20,000,000 years ago. Its size was between that of a large dog and a Shetland pony. The outside toes did not reach the ground.



Pliohippus lived about 15,000,000 years ago. This mammal was larger than a Shetland pony, almost as large as a modern horse. Very little remained of the two outside toes.



This modern wild horse is smaller than some of its artificially selected descendants, such as Percherons or Clydesdales. Figure 12•9 shows some of the variety that has been developed in modern horses.

