

3.2 Evidence for Human Origins in the East Africa Rift Valley

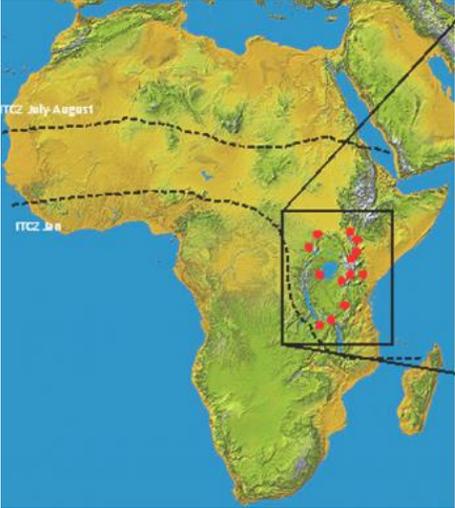
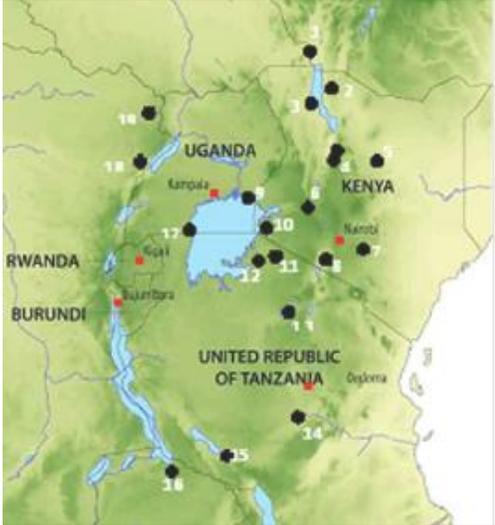
Primary Source: <http://humanorigins.si.edu/evidence>

Instructions: Using documents A-E, wrote a 250-word essay explaining the evidence for human evolution in the East Africa Rift Valley.

A. Charles Darwin Speculates in *Decent of Man*

“In each great region of the world the living mammals are closely related to the extinct species of the same region. It is, therefore, probable that Africa was formerly inhabited by extinct apes closely allied to the gorilla and chimpanzee; and as these two species are now man's nearest allies, it is somewhat more probable that our early progenitors lived on the African continent than elsewhere” (199).

B. Maps Showing Human Origins in the East Africa Rift Valley

	
<p>The East African Rift Valley stretches north from Lake Malawi and Lake Victoria and follows the Nile River to the Mediterranean Sea.</p>	<p>Major sites for early humanoid fossils in East Africa near Lake Malawi and Lake Victoria.</p>

C. Climate Change promoted Human Evolution (Columbia University Earth Institute)

The earliest hominins, or human ancestors, are thought to have split off from chimpanzees some 6 million to 7 million years ago. Many scientists have argued that they were set on the path to become modern humans as east Africa’s vegetation gradually shifted from dense forest to savanna — open grasslands punctuated by woodland patches and rivers. This would have forced our ancestors to descend from the trees, move rapidly over open ground, and develop social skills needed for survival. In recent years, the long-held notion that humans evolved in grasslands alone has given way to a more nuanced view, that it was the increasing diversity of such landscapes including the grasses that led to the success of the hominins who were smartest and most flexible at adapting to a changing world. The new study supplies by far the longest and most complete record of ancient plant life in much of what is now Ethiopia and Kenya, the assumed birthplace of humanity. It strongly suggests that between 24 million and 10 million years ago – long before any direct human ancestors appeared — there were few grasses, and woodlands thus presumably dominated. Then, with an apparent shift in climate, grasses began to appear. The study shows that the trend continued through all known human evolution, leading to a dominance of grasses by a few million years ago.

D. Early Hominin Artifacts from the African Rift valley

		
<p>Australopithecus afarensis, "Lucy," Ethiopia, 1974, 3.2 million years ago</p>	<p>Homo Habilis Koobi For a, Kenya, 1973 1.9 million years ago</p>	<p>Homo Erectus Turkana Boy, Kenya, 1984, 1.6 million years ago</p>

E. Smithsonian Timeline for Human Evolution

