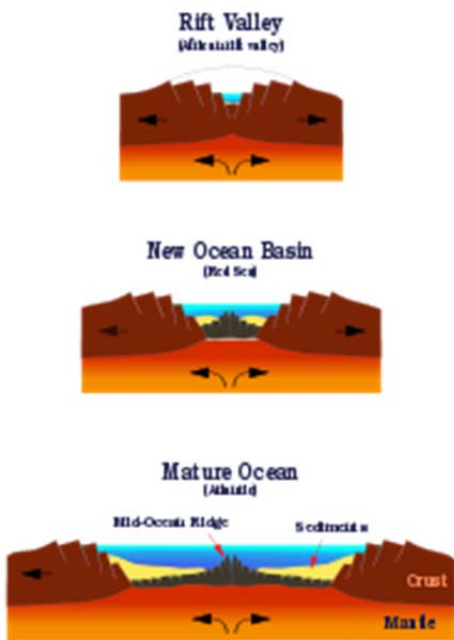


The **Great Rift Valley** is a name given in the late 19th century by British explorer [John Walter Gregory](#) to the continuous geographic trench, approximately 6,000 kilometres (3,700 mi) in length, that runs from northern [Syria](#) in [Southwest Asia](#) to central [Mozambique](#) in South East Africa. The name continues in some usages, although it is today considered geologically imprecise as it combines features that are today regarded as separate, although related, [rift](#) and fault systems. Today, the term is most often used to refer to the valley of the [East African Rift](#), the divergent plate boundary which extends from the [Afar Triple Junction](#) southward across eastern [Africa](#), and is in the process of splitting the [African Plate](#) into two new separate plates. Geologists generally refer to these incipient plates as the [Nubian Plate](#) and the [Somali Plate](#).

The East African rift has two branches, the [Western Rift Valley](#) and the [Eastern Rift Valley](#).

The Western Rift, also called the Albertine Rift, is edged by some of the highest mountains in Africa, including the [Virunga Mountains](#), [Mitumba Mountains](#), and [Ruwenzori Range](#). It contains the [Rift Valley lakes](#), which include some of the deepest [lakes](#) in the world (up to 1,470 metres (4,800 ft) deep at [Lake Tanganyika](#)). Much of this area lies within the boundaries of national parks such as [Virunga National Park](#) in the [Democratic Republic of Congo](#), [Rwenzori National Park](#) and [Queen Elizabeth National Park](#) in [Uganda](#), and [Volcanoes National Park](#) in [Rwanda](#). [Lake Victoria](#) is considered to be part of the rift valley system although it actually lies between the two branches. All of the [African Great Lakes](#) were formed as the result of the rift, and most lie within its rift valley.



In [Kenya](#), the valley is deepest to the north of [Nairobi](#). As the lakes in the Eastern Rift have no outlet to the sea and tend to be shallow, they have a high [mineral](#) content as the evaporation of water leaves the salts behind. For example, [Lake Magadi](#) has high concentrations of soda ([sodium carbonate](#)) and [Lake Elmenteita](#), [Lake Bogoria](#), and [Lake Nakuru](#) are all strongly alkaline, while the freshwater springs supplying [Lake Naivasha](#) are essential to support its current biological variety.

The northernmost part of the Rift, today called the [Dead Sea Transform](#) or Rift, forms the [Beqaa Valley](#) in Lebanon separating the [Lebanon Mountains](#) and [Anti-Lebanon Mountains](#). Further south it is known as the [Hula Valley](#) separating the [Galilee](#) mountains and the [Golan Heights](#). The [River Jordan](#) begins here and flows southward through [Lake Hula](#) into the [Sea of Galilee](#) in [Israel](#), then continues south through the [Jordan Rift Valley](#) into the [Dead Sea](#) on the [Israeli-Jordanian](#) border. From the Dead Sea southwards, the Rift is occupied

by the Wadi [Arabah](#), then the [Gulf of Aqaba](#), and then the [Red Sea](#). Off the southern tip of Sinai in the Red Sea, the [Dead Sea Transform](#) meets the [Red Sea Rift](#) which runs the length of the Red Sea. The Red Sea Rift comes ashore to meet the [East African Rift](#) and the [Aden Ridge](#) in the [Afar Depression](#) of East Africa. The junction of these three rifts is called the [Afar Triple Junction](#).

The first Europeans to penetrate Central and East Africa reported [snow](#) at the [equator](#) but were not initially believed. The Royal Geographical Society sent an expedition to the region in search of the [Nile](#)'s source. The detailed reports of that trip helped [Austrian](#) geologist Eduard Suess formulate his theory that the system of valleys and lakes that crossed [Arabia](#) and [Africa](#) was part of a continuous trough. In 1891 he published a paper attributing the geology and structural geography between [Syria](#) and [Malawi](#) to interconnected movements within the [Earth](#). The following year, British explorer John Walter Gregory began his explorations of East Africa. His comparisons of geological strata led him to conclude that faulting, not erosion, had formed the valley to which he gave the name "Great Rift Valley," the name still used for the entire African Rift.

The Rift Valley has been a rich source of [fossils](#) that allow study of [human evolution](#). [Richard Leakey](#) has speculated that the diversity of environments resulting from the creation of the Rift Valley provided "an ideal setting for evolutionary change." The presence of multiple lakes in the region would have drawn animals, including [hominids](#). Furthermore, the rise and fall of lake levels and seasonal flooding of [rivers](#) aided in burying and preserving [bones](#). The numerous active [volcanoes](#) in the region provided volcanic ash that would later allow dating of the fossils that were found.

There is no reason to conclude that early hominids were confined to East Africa, but because the rapidly eroding highlands filled the valley with sediments, a favorable environment for the preservation of remains was created. The bones of several hominid ancestors of modern humans have been found there, including those of "Lucy," a nearly complete [Australopithecus](#) skeleton that was discovered by [anthropologist](#) Donald Johanson. The husband and wife team of [Richard](#) and [Mary Leakey](#) has also done significant work in this region.

It has been suggested by scientists that the Rift's trough may have been an important route for human dispersal

A wide variety of fauna inhabit the Rift Valley. Those parts that are grasslands contain a greater concentration of wild [animals](#) than any other area of comparable size. Species unique to the Rift Valley include the mountain [gorilla](#) that is found on the forested slopes of the Virunga volcanoes and fish that dwell in the alkaline springs.

The wide variety of terrains—from desert to mountain—results in adaptation of flora to altitude, temperature, and rainfall totals.