Hippos

We do not have any complete skeletons of the Langebaanweg hippos (hippopotamids). These animals are mainly represented by jawbones or single teeth and postcranial bones including several foot and hand bones (carpals, tarsals, metapodials, phalanges).

In order to work out how hippo evolution has occurred it is necessary to explore the relationship of the Langebaanweg hippos to other fossil hippo species from eastern and central Africa which are of the same age, or slightly older or younger. The hippo fossils from Langebaanweg appear to belong to one species and show a primitive dental pattern also found in other early Hippopotaminae, notably *Archaeopotamus* from Turkana Basin (Kenya) and *Hexaprotodon garyam* (northern Chad). However, some of the dental features seen in the Langebaanweg hippos are unique and may indicate that they represent an endemic form.

Hippos are very dependent on water and are restricted in their movements as they need to stay close to rivers or lakes. The relationship of the Langebaanweg hippo to other hippos in Africa should therefore provide information on the relationship of rivers, and the availability of water bodies, during the transition between the Miocene and the Pliocene.

In terms of paleoecology, the Langebaanweg hippopotamid had a C3-based diet (see 'You are what you eat...'), which is different from the mixed to C4-dominant diet (see 'You are what you eat...'), observed in eastern and central African hippo species. A micro-wear study of the hippotamid teeth was made in order to find out if this difference is linked to the fact that the Langebaanweg hippo is a browser, or if this hippopotamid was feeding on C3 grass.

Fossil Relatives: Despite their physical resemblance to pigs and other terrestrial, even-toed ungulates, the hippos' closest living relatives are cetaceans, that is the family to which whales, porpoises etc. belong. The common ancestor of whales and hippos split from other even-toed ungulates around 60 million years ago. The earliest known hippopotamus fossils, belonging to the genus *Kenyapotamus* in Africa, date to around 16 million years ago.

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Some background information on the hippopotamus:

The word hippopotamus comes from the greek word hippos, meaning "horse" and potamos meaning "river". There are today only two extant species belonging to the hippo family (the Hippopotamidae), one of which is the common hippopotamus commonly found in sub-Saharan Africa, and the other being the Pygmy hippopotamus which is native to the forests and swamps of western Africa. The hippopotamus is semi-aquatic, and lives in and around rivers and lakes in sub-Saharan Africa in groups of 5-30 hippos. These groups are termed 'pods'. During the day they remain cool by resting in the water or mud. Both reproduction and childbirth occur in water and stretches of river are guarded by territorial males (called bulls). Hippos are not territorial on land and emerge at dusk to spend the night grazing on grass.

The hippo's plump, stocky appearance makes it appear slow-moving. This is deceptive as it can easily outrun a human and hippos have been clocked moving at 30 mph (48 km/h) while running short distances - faster than an Olympic sprinter! The hippopotamus is also generally considered to be Africa's most dangerous animal.

There are an estimated 125,000 to 150,000 hippos remaining throughout Sub-Saharan Africa, of which Zambia (40,000) and Tanzania (20,000-30,000) have the largest populations. Hippo populations are currently threatened by poaching for their meat and ivory canine teeth, and by habitat loss.

(Information from http://en.wikipedia.org/wiki/Hippopotamus).