Afrotheria, one of four mammalian superorders, comprises elephants, sea cows, hyraxes, aardvark, elephant shrews, tenrecs and golden moles. Their placentas either form an equatorial band or are discoid in shape. The interhemal region, separating fetal and maternal blood, is endotheliochorial in elephants, aardvark and possibly the sea cows, but hemochorial in the remaining orders. There is a secondary epitheliochorial placenta in elephant shrews while a similar structure in tenrecs erodes maternal tissues. Specialized hemophagous regions are a striking characteristic of some of these placentas yet absent in hyraxes, elephant shrews, and golden moles. It is possible that the common ancestor of the Afrotheria had an endotheliochorial placenta. Establishment of a hemochorial condition, as seen in rock hyraxes, elephant shrews, tenrecs, and golden moles, would be a more recent development. The elephant, manatee, and aardvark all have circumferential placentas. Thus the formation of a discoid placenta with a more or less extensive secondary placenta in elephant shrews and tenrecs would also be a derived state.