

FOSSIL CATARRHINES FROM THE EARLY LATE MIOCENE OF NAKALI IN KENYA

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This study aims to provide new information on the catarrhine fauna of the African early Late Miocene. In the present primate fossil record of Africa, there is a great gap during the late Middle to early Late Miocene, despite that this is a critical period to understand the divergence of extant African great apes and humans as well as the early evolution of the modern-typed Old World monkeys (cercopithecines and colobines). Nakali is one of the few early Late Miocene fossil localities known in East Africa. We have carried out a new field survey in Nakali for recent several years. Our geological studies have determined the age of Nakali more precisely than before, to be 9.9-9.8 Ma. Hundreds of new fossils have been recovered through surface collection and excavations. Especially, the number of catarrhine fossils from Nakali has been greatly increased. At present, they include two species of large-bodied hominoids, at least three species of non-cercopithecoid small catarrhines, and Old World monkeys including colobines. These discoveries have largely expanded the known diversity of fossil catarrhines during the above-mentioned great gap in the African primate fossil record. The newly discovered catarrhine fossils from Nakali indicate that non-cercopithecoid catarrhines were still fairly diverse at the early Late Miocene. After 7-6 Ma, the African primate fossil record is dominated with Old World monkeys. The circumstantial evidence suggests that the decline of non-cercopithecoid catarrhines would have occurred around 9-8 Ma.

Keywords: Late Miocene, Africa, catarrhines, hominoids