

A large extinct marabou stork in African Pliocene hominid sites, and a review of the fossil species of *Leptoptilos*

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New fossils of the family Ciconiidae from Pliocene hominid localities in Chad and Ethiopia are described, and several are shown to belong to *Leptoptilos falconeri*, originally known from the late Pliocene of the Siwalik Hills of India. Comparisons with all the hitherto known species of large Ciconiidae, and with an enlarged sample representing extant species, lead to a re-evaluation of some extinct taxa. Several synonymies are proposed, reflecting better the past diversity for this group. *L. pliogenicus* (Pliocene, Ukraine) is equivalent to *L. cf. falconeri*. *Cryptociconia indica* (late Pliocene, Siwalik Hills) belongs to *Leptoptilos*, and is probably either extant *L. dubius* or female *L. falconeri*. *L. siwalicensis*, from the same locality and also tentatively reported from the late Miocene of Northern Pakistan, is better referred to as *Leptoptilini* gen. et sp. indet. We consider the two following species as valid. *L. titan* (Pleistocene, Java) may be a late offshot of the lineage of *L. falconeri*. *L. richae* (late Miocene, Tunisia) is the size of *L. crumeniferus*, and is distinct from *L. falconeri*. Thus, *L. falconeri* remains the only ascertained extinct Pliocene species in the tribe *Leptoptilini*. It was a widespread 'giant' marabou stork, in the Pliocene of southern Asia, as well as northern and eastern Africa where it coexisted with different Pliocene hominids, and probably eastern Europe. It weighed up to about 20 kg, reached 2 m in height, and had probably slightly reduced forelimbs. It became extinct by the end of the Pliocene. *L. falconeri* is an example of a biogeographical link at the species level between the African and Eurasian faunas in the Pliocene. The fossil record indicates the presence of at least one other lineage in Africa since the early Miocene, similar in size to the extant *L. crumeniferus*.

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