

Re-evaluation of the Arikareean (Late Oligocene to Early Miocene) Tecuya Canyon Land Mammal Local Faunas, Lower Member, Continental Tecuya Formation, Northern San Emigdio Mountains, Kern County, California

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The Tecuya Canyon Local Faunas (TCLFs) consist of two stratigraphically superposed fossil land mammal assemblages that occur in the lower mbr. of the continental Tecuya Fm. The fossil-bearing strata grade laterally into the marine upper Pleito and stratigraphically overlying lower Temblor Fms., which contain fossil marine molluscan and benthic foraminiferal assemblages.

The Lower TCLF occurs roughly 75 m below the Tunis Volcanics at CIT locality 116 and UCMP localities 3352 and 3354; includes *Archaeolagus* sp. (rabbit), *Protosciurus tecuyensis* (Bryant) (squirrel), *Leidymys nematodon* (Cope) (mouse), *Daphoenus* sp. (includes *Daphoenus? ruber* Stock) (bear dog), *Miohippus annectens* Marsh (horse), *Diceratherium armatum* Marsh (large rhinoceros), *Eporeodon major* (Leidy) (medium-sized oreodont), *Nanotragulus loomisi* Lull (small brachyodont mouse deer), and *Hypertragulus planiceps* (Sinclair) (large mouse deer); and is from a stratigraphic interval probably laterally equivalent to one containing mollusks assignable to an unnamed stage and lower Zemorrian benthic foraminifers. The overlapping biochronologic ranges of *Archaeolagus*, *L. nematodon*, *D. annectens*, *E. major*, *N. loomisi*, and *H. Planiceps* indicate the Lower TCLF is late early Arikareean in age and a correlative of the Blakeley, Alamos Canyon, and upper South Mountain Local Faunas (LFs) (uppermost upper mbr. Sespe Fm. [SF]) in Ventura Co., the Lower Bowerman Landfill LF (lowermost upper mbr., SF) in Orange Co. (OC), and the Upper Eastlake LF (sandstone-mudstone mbr., Otay Fm.) in San Diego Co.

The Upper TCLF occurs only about 8-9 m below the volcanics at UCMP locality V-6378; includes *Oreolagus* sp. (pika) and *L. nematodon*, which have overlapping biochronologic ranges only during the late early and late Arikareean; and possibly is a correlative of the late Arikareean Upper OC Sespe/Vaqueros Fauna (lower [but not lowermost] upper mbr., SF). The Upper TC LF is from a stratigraphic interval laterally equivalent to one containing mollusks assignable to the Vaqueros Stage and upper Zemorrian benthic foraminifers.