

# CATALOGUE OF LATE QUATERNARY VERTEBRATES FROM CALIFORNIA

Revised 26 March 2010: Added/deleted since 1991 publication: \* addition = entire entry new; addition \* = new taxonomic report, locality information or reference.

## ALAMEDA COUNTY

**Alameda Canal, Alameda:** UCMP V69168

Relative age: Rancholabrean

Taxon: *Paramylodon* sp.

Source: TAXIR

**Alameda Creek:** YPM

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**Alameda County:** UCMP V67098; USNM

Relative age: Rancholabrean

Taxa: Ursidae

*Bison latifrons*

Source: TAXIR

**Alameda County:** WC

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: Hay (1927)

**Alameda County:** YPM

Relative age: Rancholabrean

Taxon: *Nothrotheriops* sp.

Source: Hay (1927)

**Alameda Tube Excavation, Alameda:** UCMP V62027

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Arctodus* sp.

*Mammuthus* sp.

*Camelops* sp.

*Bison* sp.

Source: TAXIR

**Aquatic Park, Berkeley:** UCMP V40007

Relative age: Rancholabrean

Taxon: *Bison* sp.

Sources: TAXIR, Savage (1951)

**Arroyo Agua Fria, Milpitas:** UCMP V72003

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Arroyo Las Positas, Livermore:** FMNH; UCMP V69167

Relative age: Rancholabrean

Taxa: *Clemmys* sp.  
Anatidae  
*Canis dirus*  
*Mammut* sp. cf. *M. americanum*  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops hesternus* (type locality)  
*Bison antiquus*

Sources: TAXIR, McDonald (1981), Harris (1985)

**"Auchenia", Castro Valley:** UCMP V66142

Taxon: ? Camelidae

Note: Specimen/s not listed in UCMP TAXIR database.

**Bay Bridge Caisson, Oakland:**

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Savage (1951)

**Berkeley Municipal Warf:** UCMP V36013

Relative age: Rancholabrean

Taxon: *Mammuthus* sp. cf. *M. columbi*

Source: TAXIR, Savage (1951)

**Bolinas Creek:**

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Savage (1951)

**Boomer Hill, Newark:** UCMP V69199

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: TAXIR

**Calaveras Dam, Calaveras Reservoir:** UCMP V39037

Relative age: Rancholabrean

Taxon: *Mammut* sp. cf. *M. americanum*

Source: TAXIR, Savage (1951)

**California Aqueduct Number 3:** UCMP V70123

Geologic formation: Tulare Formation

Relative age: uncertain

Taxon: *Orthodon* sp.

Source: TAXIR

**California Canal Numbers 1-2:** UCMP V70079-V70080

Geologic formation: Tulare Formation

Relative age: uncertain

Taxa: *Acipenser* sp.  
*Orthodon* sp.  
*Archoplites* sp.  
cf. *Branta* sp.

Source: TAXIR

**California Sand and Gravel Company Pit, Numbers 1-2, Pleasanton:** UCMP V61011, V75112

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
*Bison alaskensis*

Sources: TAXIR, McDonald (1981), Harris (1985)

**Centerville, Newark:** (?= UCMP V53070)

Relative age: uncertain

Taxa: ? Proboscidea  
*Equus pacificus*

Source: Hay (1927)

**Centerville Gravel Pit, Newark:** UCMP V53070

Relative age: Rancholabrean

Taxa: *Mammut americanum*  
*Camelops* sp.  
*Odocoileus* sp.  
*Bison* sp.

Source: TAXIR

**Crow Canyon, Edenvale:**

Relative age: Rancholabrean

Taxa: *Equus* sp.  
*Camelops* sp.

Source: Savage (1951)

**Delta Mendota, Numbers 10-12, 18, 21-23, 26, Livermore** (Delta Mendota General):

UCMP V47027-47028, V48001-48003, V48016-48018, V48060-48062, V69166

Relative age: Rancholabrean (other Delta Mendota localities maybe Irvingtonian)

Taxa: *Paramylodon harlani*  
*Thomomys* sp.  
*Microtus* sp.  
*Mammut americanum*  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.  
*Bison* sp. cf. *B. antiquus*

Source: TAXIR, Jefferson (1989b)

**Doolan Canyon, Livermore** (?= Livermore north): UCMP V41003 (?= UCMP V10082)

Relative age: Rancholabrean

Taxa: *Paramylodon* sp. cf. *P. harlani*  
*Mammut* sp. cf. *M. americanum*  
*Equus* sp.  
*Bison antiquus*

Sources: TAXIR, Savage (1951), McDonald (1981), Harris (1985)

**Harris, T., Ranch:** UCMP V81118

Note: Specimen/s not listed in UCMP TAXIR database.

**Harrison Street Tunnel, Oakland:** UCMP V28041

Relative age: Rancholabrean

Taxon: *Mammuthus* sp. cf. *M. columbi*

Source: TAXIR, Savage (1951)

**Hayward Freeway (I-238):** UCMP V52058

Relative age: Rancholabrean

Taxon: *Bison latifrons*

Source: TAXIR

**Hayward Gravel Pit:** UCMP V59028

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Hayward Motel:** UCMP V63004

Relative age: Rancholabrean

Taxon: Equidae

Source: TAXIR

**Lafayette:**

Relative age: ? Rancholabrean

Taxon: Proboscidea

Source: Savage (1951)

**Las Trampas Creek, Lafayette:**

Relative age: ? Rancholabrean

Taxon: Proboscidea

Source: Savage (1951)

**Livermore:**

Relative age: Rancholabrean

Taxa: *Canis dirus*  
*Panthera atrox*  
*Camelops hesternus*  
*Bison antiquus*

Source: Harris (1985)

**Livermore North** (?= Doolan Canyon): UCMP 10082 (?= UCMP V41003)

Source: Savage (1951)

Note: See Doolan Canyon UCMP V41003.

**Livermore Valley:** USNM

Relative age: Rancholabrean

Taxa: *Mammuthus columbi*  
*Equus* sp.  
*Hemiauchenia* sp.  
*Cervus* sp. or *Odocoileus* sp.  
*Bison antiquus*

Source: Hay (1927)

**Livermore West:** UCMP 1077

Relative age: Rancholabrean

Taxa: *Equus* sp.  
*Bison bison*

Source: TAXIR

**Mission San Jose, Fremont:** YPM 905

Relative age: Rancholabrean

Taxa: *Branta canadensis*  
*Meleagris richmondi* (type locality)  
*Mammut* sp.  
*Mammuthus columbi*  
*Equus* sp.  
Camelidae  
? *Cervus* sp.  
*Bison* sp.

Sources: Hay (1927), Miller and DeMay (1942), Lundelius *et al.* (1983)

**Montclair Playground, Oakland:** UCMP V39033

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
Camelidae

Source: TAXIR, Savage (1951)

**Mountain House (Mountain Home):** UCMP V38023

Relative age: Rancholabrean

Taxon: Edentata

Source: TAXIR

**Newark:** UCMP V69195

Relative age: Rancholabrean

Taxon: Camelidae

Source: TAXIR

**Niles Community:** UCMP V59033

Relative age: Rancholabrean

Taxa: *Mammut americanum*  
*Bison* sp.

Source: TAXIR

**Oak Knoll Hospital View, Oakland:** UCMP V58034

Geologic formation: ? San Antonio Formation

Relative age: Rancholabrean

Taxa: Catostomidae  
*Orthodon microlepidotus*  
*Archoplites interruptus*  
Salmonidae  
*Rana* sp.  
*Taricha* sp.  
Colubridae  
Aves  
Sciuridae  
*Microtus* sp.

*Equus* sp.  
*Odocoileus* sp.

Source: TAXIR

**Oakland Coliseum:** UCMP V64020  
Relative age: Rancholabrean  
Taxon: *Paramylodon harlani*  
Source: TAXIR

**P. C. A. Pit:** UCMP V70151  
Geologic formation: Livermore Gravels  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Positas, Livermore:** UCMP V49001  
Relative age: Rancholabrean  
Taxa: Testudines  
Anatidae  
*Mammut* sp. cf. *M. americanum*  
*Mammuthus* sp.  
*Equus* sp.  
Camelidae  
Source: TAXIR, Savage (1951)

**Prune Avenue, Livermore:** UCMP V53001; (= UCMP D-2907)  
Relative age: Rancholabrean  
Taxa: *Rana* sp.  
*Aneides lugubris*  
Colubridae  
Aves  
*Scapanus latimanus*  
*Spermophilus* sp.  
*Thomomys* sp.  
*Reithrodontomys* sp.  
*Peromyscus* sp.  
*Neotoma* sp.  
*Microtus* sp.

Source: TAXIR

**Reiche Number 1, Hayward:** UCMP V48004  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Rodeo Pleistocene:** (?= UCMP V66042)  
Relative age: Rancholabrean  
Taxa: *Paramylodon* sp.  
*Panthera* sp. nr. *P. atrox*  
? *Smilodon* sp.  
*Mammuthus columbi*  
*Equus* sp.  
Camelidae

*Bison* sp.

Source: Merriam (1915)

**Rodeo Station Number 2, Rodeo:** UCMP V66042

Relative age: Rancholabrean

Taxa: *Aechmophorus occidentalis*  
*Paramylodon* sp.  
*Peromyscus californicus*  
*Mammuthus columbi*  
*Equus* sp.  
Camelidae  
*Odocoileus* sp.  
*Bison* sp.

Sources: TAXIR, Hay (1927), Miller and DeMay (1942), Lundelius *et al.* (1983), Harris (1985)

**San Lorenzo Creek, Hayward** (Hayward High School):

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Savage (1951)

**San Lorenzo Creek, 14th Street, Hayward:**

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Savage (1951)

**Shattuck Avenue number 1, Berkeley:** UCMP V67194

Relative age: Rancholabrean

Taxon: *Paramylodon harlani*

Source: TAXIR

**Sunol, Pleasanton:** UCMP V65035

Relative age: Rancholabrean

Taxon: *Mammut* sp. cf. *M. americanum*

Source: TAXIR, Hay (1927)

**University Avenue, Berkeley:** UCMP V66044

Relative age: Rancholabrean

Taxon: *Mammut* sp. cf. *M. americanum*

Source: TAXIR

**Webster Street, Berkeley:** UCMP V69170

Note: Specimen/s not listed in UCMP TAXIR database.

**Yerba Buena Island, Bay:**

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Hutchison (1967a)

**81st Avenue, Oakland:** UCMP V40045

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: Savage (1951)

ALAMEDA AND CONTRA COSTA COUNTIES

**Burke Ranch, Amador Valley:** UCMP V40047

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
*Equus* sp.  
*Bison antiquus*

Sources: TAXIR, Savage (1951), McDonald (1981), Harris (1985)

AMADOR COUNTY

**Amador County:** UCMP V69178

Relative age: Rancholabrean

Taxa: *Ursus americanus*  
*U. arctos horribilis*  
Artiodactyla (not Camelidae)

Source: TAXIR

**Drytown, Indian Creek:**

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: Hay (1927)

**Volcano:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

BUTTE COUNTY

**Oroville:** UCMP V37039

Relative age: Rancholabrean

Taxon: *Aves*  
*Mammuthus* sp.

Source: TAXIR

CALAVERAS COUNTY

**Calavaras Cave, Angels Camp:** UCMP V40009

Relative age: Rancholabrean

Taxa: *Taricha* sp.  
cf. *Myotis* sp.  
*Sylvilagus* sp.  
*Thomomys* sp.  
*Dipodomys* sp.  
*Perognathus* sp.  
*Peromyscus* sp.  
*Neotoma* sp.  
*Microtus* sp.  
*Equus* sp.

Source: TAXIR

**Douglas Flat:**



Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
Source: Hay (1927)

**Duck Bar Cave, Arnold:** UCMP V66141  
Relative age: Rancholabrean  
Taxon: cf. *Lepus* sp.  
Source: TAXIR

**Hawk Cave, Columbia:** UCMP 77091  
Relative age: Rancholabrean  
Taxa: *Equus* sp.  
*Odocoileus* sp.  
*Euceratherium collinum*  
Source: TAXIR

**Lincoln Village, Sonora:** UCMP 48022  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Mercer Cave, Murphy** (?= Murphy and or Murpheys): UCMP V67108; USNM  
Relative age: Rancholabrean, Wisconsinan, in part early Holocene  
Taxa: Aves  
*Scapanus latimanus*  
*Myotis* sp. cf. *M. yumanensis* or *Corynorhinus* sp.  
*Homo sapiens*  
*Sylvilagus* sp.  
*Lepus* sp.  
*Aplodontia rufa*  
*Spermophilus* sp.  
*Peromyscus* sp. cf. *P. maniculatus*  
*Peromyscus* sp.  
*Megalonyx jeffersoni*  
*Euceratherium* sp.

Sources: L. Barryessa (pers. comm. 1985), Harris (1985), McDonald (2003)\*

**Messenger Valley, Valley Springs:** UCMP V69177  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR, Hay (1927)

**Murpheys** (?= Mercer Cave and or Murphy): (?= UCMP V67108)  
Relative age: Rancholabrean  
Taxa: *Canis latrans*  
*Mammuthus* sp.  
*Equus pacificus*  
cf. *Odocoileus* sp.  
Source: Harris (1985)

**Murphy** (?= Mercer Cave and or Murpheys): (?= UCMP V67108)  
Relative age: Rancholabrean  
Taxa: *Mammut* sp.

*Mammuthus* sp.

Source: Hay (1927)

**Table Mountain:** MCZ

Relative age: early Holocene

Taxon: *Homo sapiens* ("Calaveras Skull")

Sources: Hrdlicka (1907), Irwin (1975)

**Valley Springs** (?= Messenger Valley): AMNH; (?= UCMP 69117)

Relative age: Rancholabrean

Taxon: *Equus* sp. (small-size)

Source: Hay (1927)

CONTRA COSTA COUNTY

**Alamo Creek Number 2, Amador Valley:** UCMP V44004

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Spermophilus* sp.

Source: TAXIR, Savage (1951)

**Antioch numbers 2-3:** UCMP V16004, V40008, V60007

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Taxidea taxus*

*Mammut* sp. cf. *M. americanum*

*Mammuthus* sp.

*Equus* sp.

*Camelops* sp.

*Odocoileus* sp.

*Bison* sp.

Sources: TAXIR, Hay (1927), Savage (1951)

**Antioch Dam, Antioch:** UCMP V66050

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: TAXIR

**Bulls Head Point, Martinez:** LACM 4626; MCZ; UCMP 1359, 1363

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Equus pacificus* (type locality)

Sources: TAXIR, Hay (1927), Savage (1951)

**Byron:**

Relative age: Rancholabrean

Taxon: *Equus occidentalis*

Sources: Hay (1927), Savage (1951)

**Cameo Acres:** UCMP V51026

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Bison latifrons*

Source: TAXIR

**Central Channel, Vallejo:** UCMP V71001

Geologic formation: ? Montezuma Formation

Relative age: Rancholabrean

Taxa: *Gasterosteus aculeatus*  
Caudata  
*Clemmys marmorata*  
Serpentes  
? Picidae  
*Sorex* sp.  
*Scapanus latimanus*  
*Sylvilagus* sp.  
*Spermophilus* sp.  
*Thomomys* sp.  
*Dipodomys* sp.  
*Perognathus* sp.  
*Reithrodontomys raviventris*  
*Peromyscus californicus*  
*P. maniculatus*  
*P. truei*  
*Neotoma fuscipes*  
*Microtus californicus*  
*Bison* sp.

Source: TAXIR

**Charles Hill, Orinda:** UCMP V36009

Relative age: Rancholabrean

Taxon: *Clemmys* sp.  
*Bison* sp.

Source: TAXIR, Savage (1951)

**Concord Numbers 1-2:** UCMP V51016, V65310

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
*Equus* sp.  
*Bison* sp.

Source: TAXIR

**Dinsmore Used Car Lot (? Danville):** UCMP V61008

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: TAXIR

**Garretson (? Oakley):** UCMP 63012

Geologic formation: ? Montezuma Formation

Relative age: Rancholabrean

Taxa: *Orthodon* sp.  
*Gasterosteus aculeatus*  
Anura  
Caudata  
*Clemmys marmorata*

*Gerrhonotus coeruleus*  
*Uta* sp.  
*Crotalus* sp.  
? *Anas* sp.  
? Strigiformes  
*Sorex* sp.  
*Scapanus latimanus*  
*Sylvilagus* sp.  
*Lepus* sp.  
*Spermophilus beecheyi*  
*Thomomys* sp.  
*Perognathus* sp.  
*Reithrodontomys raviventris*  
*Peromyscus boylii*  
*P. maniculatus*  
*P. truei*  
*Neotoma* sp. cf. *N. fuscipes*  
*Microtus californicus*  
*Microtus* sp.  
*Mammuthus* sp.  
*Enhydra lutris*  
*Equus* sp.  
*Camelops* sp.  
*Odocoileus* sp.  
*Antilocapra* sp.  
*Bison* sp.

Source: TAXIR

**Heidorn, Oakley:** UCMP V47019

Relative age: uncertain

Taxon: *Equus* sp.

Source: TAXIR, Savage (1951)

**Hercules Number 2, Pinole:** UCMP V3002 (0302), V65288

Geologic formation: Montezuma Formation

Relative age: Rancholabrean

Taxa: Edentata

*Sylvilagus* sp.

*Peromyscus* sp.

*Bison* sp.

Source: TAXIR, Savage (1951)

**Highway 40 Number 1 (? Oakley):** UCMP V52025

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Sylvilagus* sp.

*Spermophilus beecheyi*

*Thomomys bottae*

*Perognathus* sp.

*Reithrodontomys raviventris*

*Neotoma fuscipes*

*Microtus californicus*

*Urocyon* sp. or *Vulpes* sp.\*

cf. *Mammuthus* sp.  
*Camelops* sp.  
*Cervus* sp.  
*Odocoileus* sp.  
*Bison* sp.

Source: TAXIR, Dundas (pers. comm. 1993)\*

**Hipparion Point Number 2, Pinole:** UCMP V52032

Geologic formation: Montezuma Formation

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*  
*Mammuthus* sp.  
*Equus* sp.

Source: TAXIR

**Jersey:** SU

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: Hay (1927)

**Jersey Island:** SU

Relative age: Rancholabrean

Taxon: *Bison latifrons*

Source: Hay (1927)

**Las Juntas Number 1, Concord:** UCMP V57005

Relative age: Rancholabrean

Taxon: *Paramylodon harlani*

Source: TAXIR

**Lawlers Boundary, Vallejo:** UCMP V71002

Geologic formation: ? Montezuma Formation

Relative age: Rancholabrean

Taxa: *Gasterosteus aculeatus*  
Amphibia  
*Clemmys marmorata*  
Serpentes  
Aves  
*Scapanus latimanus*  
*Sylvilagus* sp.  
*Sciurus* sp.  
*Spermophilus beecheyi*  
*Thomomys bottae*  
*Perognathus* sp.  
*Peromyscus* sp.  
*Neotoma fuscipes*  
*Microtus californicus*  
*Bison* sp.

Source: TAXIR

**Lone Tree Point Numbers 1-2, San Pablo Bay (Rodeo Pecten Point):** UCMP 1355, V12001, V40005

Geologic formation: Montezuma Formation

Relative age: Rancholabrean, <sup>18</sup>O stage 5 (130-70 ka BP)

Taxa: *Megalonyx* sp.  
Leporidae  
Rodentia  
*Mammuthus* sp. cf. *M. columbi*  
*Equus pacificus*  
*Camelops* sp.  
*Hemiauchenia* sp.  
*Odocoileus* sp.  
*Capromeryx minor*  
*Antilocapra* sp.  
*Bison* sp.

Sources: TAXIR, Savage (1951), G. L. Kennedy (pers. comm. 1989)

**Martinez Pleistocene:** UCMP V71131

Note: Specimen/s not listed in UCMP TAXIR database.

**Mokelumne Aqueduct Numbers 1 and 3, Pittsburg:** UCMP V60030

Relative age: Rancholabrean

Taxon: *Thomomys* sp.

Source: TAXIR

**Mount Diablo, Diablo Summit Road:** UCMP V34006

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Equus* sp.

*Bison latifrons*

Source: TAXIR, Savage (1951)

**Northern Cove, Vallejo:** UCMP V71003

Geologic formation: Montezuma Formation

Relative age: Rancholabrean

Taxa: *Gasterosteus aculeatus*

*Clemmys marmorata*

*Scapanus latimanus*

*Sylvilagus* sp.

*Spermophilus beecheyi*

*Thomomys bottae*

*Perognathus* sp.

*Reithrodontomys raviventris*

*Peromyscus* sp.

*Neotoma fuscipes*

*Microtus californicus*

Source: TAXIR

**Oak Springs:**

Relative age: uncertain

Taxon: *Mammut* sp.

Source: Hay (1927)

**Pinole, Orleans Drive:** UCMP V63013

Geologic formation: Montezuma Formation

Relative age: ? Rancholabrean

Taxa: Edentata

*Equus* sp.  
*Sphenophalos* sp.

Source: TAXIR

**Pacheco Numbers 1-2, Concord:** UCMP V77117, V78027

Relative age: Rancholabrean

Taxa: *Scapanus latimanus*  
\**Neotoma fiscipes*  
*Mammot americanum*  
\**Mammuthus* sp.  
\**Ursus americanus*

Source: TAXIR, \*Tomiyia (2007)

Note: Tomiyia reports 18 mammalian genera

**Parker:** UCMP V51024

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR

**Pinole** (?= in part other Pinole localities): (?= UCMP 1361, 1378, V63013, V65660, V67106)

Relative age: Rancholabrean

Taxa: *Mammot* sp.  
*Mammuthus* sp.  
*Equus pacificus*  
*Equus* sp. (small-size)  
*Antilocapra americana*  
*Bison* sp. aff. *B. antiquus*

Source: Hay (1927)

**Pinole Beach, Pinole:** UCMP V65660

Relative age: Rancholabrean

Taxa: *Equus pacificus*  
Camelidae

Source: TAXIR

**Pinole R.R. Numbers 1 and 3, Pinole** (Pinole RR): UCMP 1361, 1378, V67106

Relative age: Rancholabrean

Taxa: *Mammot americanum*  
*Equus* sp.  
*Bison bison*

Source: TAXIR

**Pleasant Hill:** UCMP V47001

Relative age: Rancholabrean

Taxon: *Mammot americanum*

Source: TAXIR, Savage (1951)

**Pleasant Hill High School:** UCMP V60006

Relative age: Rancholabrean

Taxon: ? *Megalonyx* sp.

Source: TAXIR

**Reliez Hill:** UCMP V50040

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Rodeo Oyster Bed, San Pablo Bay:** UCMP 524  
Relative age: Rancholabrean, <sup>18</sup>O stage 5 (130-70 ka BP)  
Taxon: *Mammuthus columbi*  
Source: TAXIR

**Sand Mound Slough, Oakley:** UCMP V65254  
Relative age: Rancholabrean  
Taxon: *Mammuthus columbi*  
Source: TAXIR

**San Pablo Bay:** UCMP V65168  
Note: Specimen/s not listed in UCMP TAXIR database.

**San Ramon Creek:** UCMP V39027  
Relative age: Rancholabrean  
Taxon: *Bison* sp.  
Source: TAXIR

**Shell Oil, Concord:** UCMP V66028  
Relative age: Rancholabrean  
Taxon: *Bison* sp.  
Source: TAXIR

**Tormey A, Pinole:** UCMP V46015, V53002  
Geologic formation: Montezuma Formation  
Relative age: Rancholabrean  
Taxa: *Thomomys* sp.  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.  
Source: TAXIR

**Union Oil Company Island, Oleum:** UCMP 1375  
Relative age: Rancholabrean  
Taxon: *Equus pacificus*  
Source: TAXIR, Savage (1951)

**Union Oil Company Tank Farm, Hercules:** UCMP V34028  
Relative age: Rancholabrean  
Taxa: *Mammut americanum*  
*Mammuthus* sp.  
*Camelops* sp.  
Source: TAXIR, Savage (1951)

#### EL DORADO COUNTY

**Cool Quarry, Auburn:** UCMP V48005  
Relative age: Rancholabrean  
Taxa: *Bufo* sp.



*Rana* sp.  
*Gerrhonotus multicarinatus*  
*Crotalus* sp.  
*Antrozous pallidus*  
*Brachylagus idahoensis*  
*Lepus* sp.  
*Spermophilus beecheyi*  
*Tamias* sp.  
*Thomomys* sp.  
*Peromyscus* sp.  
*Neotoma fuscipes*  
*Canis dirus*  
*Mephitis mephitis*  
*Felis concolor*  
*Odocoileus hemionus*  
*Bison alaskensis*

Source: TAXIR

**Gold Hill, Placerville:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**Grey's Flat, Placerville:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**Hawver Cave, Auburn:** UCMP 1069

Relative age: Rancholabrean, Wisconsinan, in part early Holocene

Taxa: *Bufo* sp.  
*Rana* sp.  
*Clemmys* sp. cf. *C. marmorata*  
*Gerrhonotus multicarinatus*  
*Sceloporus graciosus*  
*Crotalus viridis*  
*Anas crecca*  
*Cathartes aura*  
*Catharista shastense* (type locality)  
? *Coragyps occidentalis*  
*Buteo regalis*  
*Hypomorphnus milleri*  
*Buteogallus* sp.  
*Callipepla californica*  
*Oreortyx pictus*  
*Colaptes auratus*  
*Cyanocitta stelleri*  
*Corvus corax*  
? *Euphagus cyanocephalus*  
*Scapanus latimanus*  
*Homo sapiens*  
*Megalonyx jeffersonii*  
*Nothrotheriops shastensis*

*Paramylodon harlani*  
*Sylvilagus* sp.  
*Lepus californicus*  
*Aplodontia rufa*  
*Spermophilus beecheyi*  
*Thomomys* sp.  
*Peromyscus boylii*  
*Neotoma fuscipes*  
*Microtus* sp.  
*Canis latrans*  
*Canis* sp. aff. *C. dirus*  
*Ursus* sp.  
*Procyon lotor*  
*Martes* sp.  
*Mephitis mephitis*  
*Smilodon fatalis*  
*Felis concolor*  
*Felis* sp.  
*Mammut* sp.  
*Mammuthus* sp.  
*Equus* sp. ? *E. occidentalis*  
*Odocoileus* sp.  
*Bison* sp.  
*Euceratherium* sp. ? *E. collinum*

Sources: TAXIR, Miller (1911b), Stock (1918), Hay (1927), Miller and DeMay (1942), Brattstrom (1954), Kurten and Anderson (1980), Lundelius *et al.* (1983), McDonald (2003)\*

**Hawver Cave South Entrance, Auburn:** UCMP 1073

Relative age: Rancholabrean, ? in part early Holocene

Taxa: *Homo sapiens*  
*Lepus* sp.  
*Spermophilus beecheyi*  
*Thomomys* sp.  
*Mephitis mephitis*  
*Canis latrans*

Source: TAXIR

**Seacut Number 2, Grizzly Flats:** UCMP 1384

Relative age: ? Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Shingle Springs, El Dorado:** UCMP V69051

Relative age: Rancholabrean

Taxa: *Mammut americanum*  
*Bison* sp.

Source: TAXIR, Hay (1927)

**Walnut Creek Number 1, San Miguel Hill, San Miguel:** UCMP V49021

Relative age: Rancholabrean

Taxon: *Bison* sp. cf. *B. latifrons*

Sources: TAXIR, Savage (1951), McDonald (1981)

## FRESNO COUNTY

### \***Broach**, Fresno:

Relative age: Rancholabrean  
Geologic formation: Modesto Formation, upper unit  
Radiometric date: 19,230 ± 80 RCYBP  
Taxon: *Bison* sp. cf. *B. latifrons*  
Source: Dundas et al. (2009)

### \***Eagle Feather Cave 9b and 12b**: QSP 931

Relative age: Rancholabrean, Wisconsinan  
Radiometric dates: 35,610 + 5370 - 3190, 22,300 ± 170 yr BP, <sup>14</sup>C  
Taxon: *Charina* sp. cf. *C. bottae*  
Source: Cole (1983), Bell and Mead (1966)

### \***Fresno**: California State University Fresno

Relative Age: Rancholabrean  
Taxon: *Mammut* sp.\*  
Source: R. L. Reynolds and Springer (pers. comm. 1992)\*

### **Laguna Seca Ranch**: UCMP V81121

Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

### **Riverdale**: UCMP V65100

Relative age: Rancholabrean  
Taxon: Camelidae  
Source: TAXIR

### **Tranquility**: MAUCB; UCMP V44001; UPMP

Relative age: Rancholabrean, in part early Holocene  
Radiometric dates: U/Th ≥112 to 67 ka BP

Taxa: *Osteichthyes*  
*Clemmys marmorata*  
*Crotalus* sp.  
cf. *Gavia* sp.  
*Scapanus latimanus*  
*Lepus* sp.  
*Thomomys* sp.  
Heteromyidae  
*Neotoma* sp.  
*Microtus* sp.  
*Canis latrans*  
*Vulpes* sp.  
*Urocyon* sp.  
*Taxidea* sp.  
*Equus* sp.  
*Camelops* sp.  
*Cervus* sp.  
*Odocoileus* sp.  
*Bison* sp.

Sources: Hewes (1943), Irwin (1975)

GLENN COUNTY

**Willows:** CSUS

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: R. Hilton (pers. comm. 1989)

HUMBOLDT COUNTY

**Buhne's Point, Humboldt Bay** (Buhne Point): UCMP V68155

Relative age: Rancholabrean

Taxon: *Bison* sp. cf. *B. latifrons*

Source: TAXIR

**Bulmis Point, Humboldt Bay:**

Relative age: Rancholabrean

Taxon: *Bison latifrons*

Source: Hutchison (1967a)

**Crannell Junction:** HSU 197, 745

Relative age: Rancholabrean

Taxa: Osteichthyes

*Gavia immer*

*Podiceps grisegena*

*Phalacrocorax* sp.

*Anas crecca*

*Bucephala clangula*

*B. albeola*

*Mancalla diegense*

*Melanitta perspicillata*

*Chendytes* sp.

*Synthliboramphus* sp. cf. *S. antiquus*

*Enhydra macrodonta* (type locality)

*Enhydra* sp.

*Eumetopias jubata*

? *Capromeryx* sp.

Sources: Kilmer (1972), Kohl (1974), Lundelius *et al.* (1983)

**Humboldt Bay** (Humboldt Day): UCMP V65218

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: TAXIR

**Humboldt Point:** UCMP V65042

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: TAXIR, Hay (1927)

IMPERIAL COUNTY

**Algodones Dunes, Glamis:** SDSNH

Relative age: Rancholabrean

Taxon: *Equus* sp. (large-size)

**Coachella, Niland:** UCMP V53003

Relative age: Rancholabrean

Taxon: *Camelops* sp.

Source: TAXIR

**Coachella Canal:** IVCN 188, 192, 194, 228-229, 278

Geologic formation: ? Brawley Formation

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Cervidae*

*Bison* sp.

Source: IVCN collections/data

**Coachella Canal, Glamis:** IVCN 238

Geologic formation: ? Brawley Formation

Relative age: Rancholabrean

Taxa: Proboscidea

*Equus* sp.

*Camelops* sp.

*Bovidae* (small-size)

*Bison antiquus*

Source: IVCN collections/data

**Flowing Wells Number 3, East Mesa:** SBCM 11.10.7

Geologic formation: Brawley Formation

Relative age: Rancholabrean

Taxa: *Xyrauchen texanus*

? *Clemmys marmorata*

*Lepus californicus*

? *Ammospermophilus leucurus*

? *Ondatra zibethica*

Source: Reynolds (1989b)

**Flowing Wells Number 10, East Mesa:** SBCM 11.10.37

Geologic formation: Brawley Formation

Relative age: Rancholabrean

Taxa: *Gila elegans*

? *Ammospermophilus leucurus*

*Ondatra zibethica*

Source: Reynolds (1989b)

**Frink's Mineral Springs Number 3, Bat Cave Buttes:** SBCM 5.12.10

Geologic formation: Brawley Formation

Relative age: Rancholabrean

Taxa: Teleostei

Rodentia

Artiodactyla

Source: Reynolds (1989b)

**Mount Signal Gravel Pit:** LACM 1719

Relative age: Rancholabrean

Taxon: *Equus* sp.  
Source: LACM collections/data

**Picacho Peak Midden:** UALP 8157A, 8157C  
Relative age: Rancholabrean, in part early Holocene  
Radiometric dates:  $^{14}\text{C}$  9,590  $\pm$  190, 8,410  $\pm$  275 yr BP  
Taxa: *Perognathus baileyi*  
*Neotoma* sp.  
Source: Mead *et al.* (1983)

**Salton City South:** LACM 1726  
Relative age: Rancholabrean  
Taxon: *Nothrotheriops* sp.  
Source: McDonald (1985)

**San Felipe Hills:** LACM 1654  
Geologic formation: Brawley Formation  
Relative age: ? late Irvingtonian or early Rancholabrean  
Taxa: *Equus* sp.  
*Camelops* sp.  
Source: LACM collections/data

**Seeley West:** UCMP V59031  
Note: Specimen/s not listed in UCMP TAXIR database.

**Siphon Eleven Number 3, East Mesa:** SBCM 11.10.28  
Geologic formation: Brawley Formation  
Relative age: Rancholabrean  
Taxa: Iguanidae  
*Perognathus* sp.  
*Dipodomys deserti*  
*Peromyscus* sp.  
*Camelops hesternus*  
Source: Reynolds (1989b)

## INYO COUNTY

**Bedelle, Inyo Mountains:** UCMP V37025  
Note: Specimen/s not listed in UCMP TAXIR database.

**Haiwee Reservoir:** LACM 3514, 4538  
Relative age: uncertain, Irvingtonian or Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Gust (2003)\*

**\*Lake Rogers, Death Valley:**  
Relative age: Pleistocene  
Taxon: *Mammuthus* sp.  
Source: Clements (1973)

**Lone Pine:**  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp. ? *M. columbi*

Sources: Hay (1927), Jefferson (1989a), Gust (2003)\*

**Lone Pine Southeast** (Owens Lake): LACM 4691

Relative age: Rancholabrean

Taxa: Felidae (medium-size)  
Proboscidea  
*Equus* sp.  
Camelidae

Sources: D. P. Whistler (pers. comm. 1981), Jefferson (1989a), Gust (2003)\*

**Owens Lake East:** SBCM 6.6.3-6.6.4

Relative age: Rancholabrean

Taxa: *Equus* sp.  
*Camelops* sp.  
*Bison* sp.

Source: Jefferson (1989a), Gust (2003)\*

**Panamint Crater, Panamint Valley:** UALP 49

Relative age: Rancholabrean, late Pleistocene\*

Taxa: *Gopherus agassizi*  
*Lepus* sp.  
*Neotoma* sp.  
Rodentia  
Canidae  
*Equus* sp. (large-size)  
*Equus* sp. (small-size)  
*Hemiauchenia* sp.  
Antilocapridae

Source: Jefferson (1989a), FAUNMAP (1992)\*

**Panamint Valley Sinkhole** (?= Panamint Crater, UALP 49)

Relative age: Rancholabrean

Taxa: Cathartidae or Teratornithidae  
*Equus* sp.  
*Camelops* sp.

Sources: S. Winslow (pers. comm. 1988), Jefferson (1989a)

**Shoshone Zoo, Tecopa and Tecopa Hot Springs:** SBCM 6.1.8

Geologic formation: inset in Amargosa Alloformation

Relative age: early Rancholabrean, Illinoian

Taxa: *Lepus* sp. cf. *L. californicus*\*  
*Peromyscus* sp.  
Rodentia  
*Mammuthus columbi*  
*Equus conversidens*\*  
*Equus* sp. (large-size)  
*Equus* sp. (small-size) A\*  
*Equus* sp. (small-size) B\*  
*Hemiauchenia* sp.\*  
*Camelops* sp. cf. *C. hesternus*\*

Sources: Hillhouse (1987), Jefferson (1990a), R. E. Reynolds (1991b)\*, Scott (1997)\*, Morrison (1999)\*

Note: *E. conversidens* may be same as *E. sp. B*

**\*Swansea and Keeler** (Owens Lake): UCMP  
Geologic formation: Owens Lake playa  
Relative age: Rancholabrean and/or early Holocene  
Taxa: *Athya affinis*  
*Sternella neglecta*  
*Thomomys bottae*  
Source: Gust (2003)

**Tecopa Basin, Tecopa and Tecopa Hot Springs:** LACM 1209; CSUS  
Geologic formation: Tecopa lake beds (informal)  
Relative age: early Rancholabrean, Illinoian  
Taxa: Rodentia  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp. (large-size)  
*Equus* sp. (small-size)  
cf. *Hemiauchenia* sp.  
Cervidae  
Sources: Feller (1983), James (1983), Hillhouse (1987), R. E. Reynolds (pers. comm. 1988), Jefferson (1990a)

**\*Ubehebe Crater, Death Valley: \*\***  
Relative age: ?  
Geological formation: Lake Rodgers beds  
Radiometric date: contains Upper Glass Mountain tephra  
Taxon: *Mammuthus* sp.  
Source: Clements (1952, 1954), Knott (pers. comm. 2005)

**\*Waucobi** (Waucoba): LACM(CIT) 265  
Relative age: late Pleistocene  
Geologic formation: Waucobi Lake Beds  
Taxon: *Equus* sp.  
Sources: Schultz (1938), Nelson and Whistler (pers. comm. 1992)\*  
Note: Incorrectly reported as Waucobi Lake Beds.

**Zurich Numbers 1-2, Big Pine:** UCMP 1764-1765  
Note: Specimen/s not listed in UCMP TAXIR database.

#### KERN COUNTY

**\*Arvin Landfill** (Arvin # 2 and #3): UCMPV 93068  
Relative age: ? Holocene, ? Rancholabrean  
Taxa: ? *Hyla* sp.  
Lacertilia  
Leporidae  
? *Thomomys* sp.  
*Dipodomys* sp.  
*Neotoma* sp.  
*Microtus* sp.  
Canidae  
Source: Fay and Thiessen (1993)

**Asphalto Number 2, McKittrick:** UCMP 4096, V78041  
Geologic formation: ? Tulare Formation



Relative age: ? Blancan and or in part Irvingtonian and Rancholabrean

Taxa: *Borophagus pachydon*  
*Ischyrosmilus* sp.  
*Felis concolor*  
*Mammuth americanum*  
*Equus occidentalis*  
*Hemiauchenia* sp.

Sources: TAXIR, Kurten and Anderson (1980)

\*Note: Blancan and Irvingtonian taxa included.

**Bakersfield Canal Cutting:** UCMP V65247

Relative age: Rancholabrean

Taxon: *Equus occidentalis*

Source: TAXIR

**Bodfish, Lake Isabella:** KVM

Relative age: Rancholabrean

Taxon: ? *Mammuthus* sp.

Source: R. T. Merriam (pers. comm. 1984)

**China Lake, China Lake Local Faunule, Ridgecrest:** LACM(CIT) 266, LACM 1543, 3569, 7013, 7262\*

Relative age: Rancholabrean, mid- to late Wisconsinan\*

Radiometric dates: U/Th  $42,350 \pm 3,300^*$ ,  $^{14}\text{C}$   $18,600 \pm 450$ ,  $11,800 \pm 800$  yr BP

Local Fauna: China Lake Local Faunule

Taxa: *Gila bicolor mohavensis*  
Anura  
Testudines  
*Aechmophorus* sp.  
*Phalacrocorax* sp.  
*Anas* sp.  
*Aythya* sp.  
*Branta* sp.  
*Cygnus* sp.  
*Oxyura* sp.  
*Aquila* sp. cf. *A. chrysaetos*  
*Haliaeetus* sp.  
*Fulica* sp.  
*Grus* sp.  
Edentata  
*Microtus californicus*  
*Canis* sp.  
*Smilodon* sp.  
Felidae (large-size)  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp. cf. *E. conversidens*  
*Equus* sp. cf. *E. occidentalis*  
*Camelops* sp. cf. *C. hesternus*  
*Hemiauchenia* sp.  
*Odocoileus* sp.  
*Bison antiquus*  
*Bison* sp. (large-size)

Sources: VonHuene (1971)\*, Fortsch (1978), Kurten and Anderson (1980), McDonald (1981), Davis *et al.* (1980, 1981a, 1981b)\*, Davis (1982), Agenbroad (1984), Jefferson (1989a), FAUNMAP (1992)\*,

Scott (2002)\*, Basgall (2003)\*, Moore et al. (2003)\*

**\*Clay Mine Road, Lake Thompson:** SBCM 1.155.1

Relative age: Rancholabrean

Taxa: *Phrynosoma platyrhinos*  
Colubridae  
Aves spp.  
*Lepus* sp.  
*Sylvilagus* sp.  
*Perognathus* sp.  
*Perognathus* sp. (small-sized)  
*P. nr. P. longimembris*  
*Dipodomys* sp.  
*Neotoma* sp.  
*Vulpes* sp.  
*Canis latrans*

Source: Reynolds and Reynolds (1991b)

**Dove Springs Number 7, Red Rock Canyon:** UCMP V67225

Note: Specimen/s not listed in UCMP TAXIR database.

**Dove Springs Lignites Local Fauna, Red Rock Canyon:** LACM 4708-4709

Relative age: Rancholabrean, Wisconsinan

Radiometric date:  $^{14}\text{C}$  10,730  $\pm$  110 yr BP

Local Fauna: Dove Springs Lignites LF

Taxa: Anura  
*Sceloporus occidentalis*  
*Phrynosoma* sp.  
*Gerrhonotus* sp.  
*Lampropeltis zonata*  
*Pituophis melanoleucus catenifer*  
Passeriformes  
*Sorex palustris*  
*Pipistrellus hesperus*  
*Sylvilagus* sp.  
*Ammospermophilus* sp.  
*Tamias minimus*  
*Thomomys monticola*  
*Dipodomys* sp. cf. *D. merriami*  
*Dipodomys* sp. cf. *D. panamintinus*  
*Perognathus longimembris*  
*P. penicillatus*  
*Reithrodontomys* sp. cf. *R. megalotis*  
*Peromyscus maniculatus*  
*Neotoma* sp. cf. *N. fuscipes* or *N. cinerea*  
*Microtus californicus*

Sources: Jefferson (1989a), Whistler and Stewart (1989), Whistler (1990)

**\*Dove Springs Megafauna Locality:** LACM

Relative age: Rancholabrean, Wisconsinan

Radiometric date: 16,860  $\pm$  1175 yBP

cf. *Canis* sp.  
cf. *Mammuth* sp.

*Mammuthus columbi*  
*Equus* sp. cf. *E. occidentalis*  
*Camelops hesternus*  
*Bison antiquus*

Source: Whistler *et al.* (1991), Scott *et al.* (2001), Scott (2002)

**\*Eagle Crest, Bakersfield:** BVMNH

Geologic formation: Qoa1

Relative age: late Pleistocene, ? Rancholabrean

Taxa: Osteichthyes  
Urodela  
?*Clemmys* sp.  
Lacertilia  
Colubridae  
Fringillidae  
Chiroptera  
*Scapanus* sp. cf. *S. latimanus*  
*Sylvilagus* sp.  
*Lepus* sp.  
*Eutamias* sp.  
*Peromyscus* sp.  
*Neotoma* sp.  
*Microtus* sp.  
*Dipodomys* sp. (large sized)  
*Dipodomys* sp. (small sized)  
*Thomomys* sp.  
*Ondatra zebethica*  
*Capromeryx* sp.  
*Odocoileus* sp.  
*Equus* sp.

Sources: Batrow (1081), Reynolds (2009)

**Elk Hills, Tupman:** UCMP V68010

Note: Specimen/s not listed in UCMP TAXIR database.

**Goler Gulch, El Paso Mountains:** LACM 3721

Relative age: Rancholabrean

Taxon: *Equus* sp. cf. *E. conversidens*

Source: Jefferson (1989a)

**Maricopa (Pentland):** BYU; IMNH 084002; LACMIP, LACM 6731, SBCM 8.8.1

Relative age: Rancholabrean, Wisconsinan, ? in part early Holocene

Radiometric date: <sup>14</sup>C 13,860 yr BP (error limits not reported)

Taxa: *Gopherus* sp.  
*Gerrhonotus multicaudatus*  
*Phrynosoma coronatum*  
*Cnemidophorus tigris*  
*Eumeces skiltonianus*  
*Uta stansburiana*  
*Nycticorax nycticorax*  
*Anas platyrhynchos*  
*A. strepera*  
*A. crecca*  
*Anas* sp.

*Ciconia maltha*  
*Teratornis merriami*  
*Gymnogyps amplus*  
*Haliaeetus leucocephalus*  
*Accipiter cooperii*  
*Buteo jamaicensis*  
*B. swainsoni*  
*Buteogallus fragilis*  
*Aquila chrysaetos*  
*Spizaetus grinnelli*  
*Neogyps errans*  
*Falco sparverius*  
*Polyborus plancus*  
*Meleagris californicus*  
*Fulica americana*  
*Grus canadensis*  
*Charadrius vociferus*  
*Calidris alpina*  
*Larus canus*  
*Geococcyx californianus*  
*Tyto alba*  
*Otus kennicotti*  
*Bubo virginianus*  
*Athene cunicularia*  
*Asio otus*  
*Corvus corax*  
*Turdus migratorius*  
*Aphelocoma californica*  
*Agelaius sp.*  
*Sturnella neglecta*  
*Toxostoma redivivum*  
*Zonotrichia leucophrys*  
*Cardinalis cardinalis*  
*Bombycilla cedrorum*  
*Pheucticus melanocephalus*  
*Nothrotheriops sp.*  
*Sylvilagus audubonii*  
*Lepus californicus*  
*Thomomys bottae*  
*Dipodomys agilis*  
*Perognathus californicus*  
*Reithrodontomys megalotis*  
*Peromyscus imperfectus*  
*Microtus sp.*  
*Taxidea taxus*  
*Canis latrans*  
*C. lupus*  
*C. dirus*  
*Vulpes macrotis*  
*Urocyon cinereoargenteus*  
*Arctodus simus*  
*Ursus arctos horribilis*  
*Smilodon fatalis*  
*Panthera atrox*

*Felis* sp. or *Panthera* sp. (large-size)  
*Mammut* sp.  
*Equus* sp.  
*Camelops* sp.  
*Hemiauchenia* sp.  
*Capromeryx minor*  
*Antilocapra americana*  
*Bison* sp. cf. *B. antiquus*

Sources: Kurten and Anderson (1980) Muleady (1980), James (1983b), Harris (1985)

**McKittrick** (McKittrick General, McKittrick West, Sternberg Pit): LACMIP 260, LACM(CIT) 138; UCMP 1370, 1386, 7139, V34001

Relative age: Rancholabrean

Radiometric date:  $^{14}\text{C}$  38,000  $\pm$  2,500 yr BP

Taxa: *Clemmys marmorata*  
*Gopherus agassizii*  
*Gambelia wislizenii*  
*Sceloporus occidentalis*  
*Eumeces gilberti*  
\**Anniella* sp.  
*Lampropeltis getulus*  
*Crotalus viridis*  
*Crotalus* sp.  
*Podilymbus podiceps*  
*Ardea herodias*  
*Butorides striatus*  
*Nycticorax nycticorax*  
*Casmerodius albus*  
*Egretta caerulea*  
*Ajaia ajaja*  
*Cygnus columbianus*  
*Branta canadensis*  
*Anas platyrhynchos*  
*A. strepera*  
*A. crecca*  
*A. cyanoptera*  
*A. clpeata*  
*A. americana*  
*A. acuta*  
*Aythya valisineria*  
*A. sp. ? A. affinis*  
*A. americana*  
*Anabernicula gracilenta*  
*Bucephala albeola*  
*Oxyura jamaicensis*  
*Ciconia maltha*  
*Teratornis merriami*  
*Coragyps occidentalis*  
*Cathartes aura*  
*Gymnogyps amplus*  
*Haliaeetus leucocephalus*  
*Circus cyaneus*  
*Accipiter cooperii*

*Buteo jamaicensis*  
*B. swainsoni*  
*B. regalis*  
*Buteogallus fragilis*  
*Aquila chrysaetos*  
*Amplibuteo woodwardi*  
*Spizaetus grinnelli*  
*Neogyps errans*  
*Neophrontops americanus*  
*Falco sparverius*  
*F. columbarius*  
*F. peregrinus*  
*F. mexicanus*  
*F. swarthi*  
*Falco* sp.  
*Polyborus plancus*  
Meleagrididae  
*Callipepla californica*  
*Fulica americana*  
*Rallus limicola*  
Gruidae  
*Charadrius vociferus*  
*C. montanus*  
*Numenius americanus*  
*N. phaeopus*  
*Recurvirostra americana*  
*Tringa melanoleucus*  
*Calidris alpina*  
*Limnodromus griseus*  
Laridae  
*Zenaida macroura*  
*Geococcyx californianus*  
*Tyto alba*  
*Otus kennicotti*  
*Bubo virginianus*  
*Athene cunicularia*  
*Asio flammeus*  
*Colaptes auratus*  
Tyrannidae  
Alaudidae  
Hirundinidae  
*Hirundo pyrrhonota*  
*Corvus corax*  
*Sorex ornatus*  
*Sorex* sp. cf. *S. trowbridgii*  
*Microsorex* sp.  
*Antrozous pallidus*  
*Megalonyx* sp.  
*Paramylodon harlani*  
*Sylvilagus audubonii*  
*S. bachmani*  
*Lepus californicus*  
*Spermophilus* sp. cf. *S. beecheyi*  
*Ammospermophilus* sp. cf. *A. nelsoni*

*Thomomys bottae*  
*Dipodomys* sp. aff. *D. ingens*  
*Perognathus* sp. cf. *P. inornatus*  
 ? *Reithrodontomys* sp.  
*Peromyscus* sp. cf. *P. californicus*  
*Onychomys* sp.  
*Neotoma lepida*  
*Microtus californicus*  
*Canis latrans*  
*C. lupus*  
*C. dirus*  
*Vulpes macrotis*  
*Arctodus simus*  
*Ursus americanus*  
*Mustela frenata*  
*Taxidea taxus*  
*Spilogale putorius*  
*Mephitis mephitis*  
*Smilodon fatalis*  
*Panthera atrox*  
*Felis concolor*  
*Lynx rufus*  
*Mammut americanum*  
*Mammuthus columbi*  
*Equus occidentalis*  
*Platygonus* sp. aff. *P. compressus*  
*Camelops hesternus*  
*Hemiauchenia macrocephala*  
*Cervus* sp. cf. *C. elaphus*  
*Odocoileus* sp. cf. *O. hemionus*  
*Capromeryx minor*  
*Antilocapra americana*  
*Bison antiquus*  
*Euceratherium* sp. cf. *E. collinum*

Sources: Hay (1927), Schultz (1938), Miller (1942b), Miller and DeMay (1942), Brattstrom (1954), Kurten and Anderson (1980), McDonald (1981), Harris (1985), Bell *et al.* (1995)\*

**McKittrick-Asphalto** (?= in part to Asphalto 2): UCMP V78042 (?= UCMP 4096, V78041)

Relative age: ? in part Irvingtonian and RanchoLabrean

Taxa: Carnivora  
*Equus* sp.  
 Camelidae  
*Bison* sp.

**McKittrick, Getty Oil Company Localities:** LACM 4428-4435

Relative age: RanchoLabrean

Taxa: Aves  
 Rodentia  
*Canis latrans*  
*C. dirus*  
*Felis concolor*  
*Lynx* sp.  
*Equus* sp.

*Camelops* sp.  
*Hemiauchenia* sp.  
*Capromeryx* sp.  
*Antilocapra* sp.  
*Bison antiquus*

**Poso Creek:** USGS 1088

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Rogers Lake, Edwards Airforce Base, Lake Thompson\*:** SBCM 1.155.8, 1.155.11,  
1.155.24-1.155.25, 1.155.51, 1.155.151, \*1.155.173, 1.155.245-1.155.246, 1.155.251, 1.155.254,  
1.155.282 (major localities only)

Relative age: Rancholabrean, ? in part early Holocene

Taxa: Osteichthys  
Reptilia  
Aves  
*Homo sapiens*  
*Sylvilagus* sp.  
*Lepus* sp.  
*Dipodomys* sp.  
*Neotoma* sp.  
? *Mammuthus* sp.  
*Equus* sp.  
? *Camelops* sp.  
cf. *Hemiauchenia* sp.

Sources: Jefferson (1989a), Reynolds (1989a), Reynolds and Reynolds (1991b)

**Rosamond Boulevard and 25<sup>th</sup> Street West:**

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
*Equus* sp.  
*Bison* sp.

Source: R. Turner (pers. comm., 2006), D. Clayton (pers. comm., 2006)

**Santa Maria Oil Spring:** ANSP

Relative age: Rancholabrean

Taxon: *Equus occidentalis*

Sources: Hay (1927), Harris (1985)

**Tehachapi:** LACM 3722; UCMP 1041

Relative age: ? Rancholabrean

Taxa: *Mammuthus* sp.  
*Equus* sp.  
Camelidae

Source: Hay (1927)

**Thurber Cave, Piute Mountains:** LACM 1276

Relative age: Rancholabrean, ? in part early Holocene

Taxa: *Tyto alba*  
Tetraonidae  
Passeriformes  
*Sylvilagus* sp.



*Lepus* sp.  
Sciuridae (large-size)  
Sciuridae (small-size)  
*Thomomys* sp.  
*Dipodomys* sp.  
? *Perognathus* sp.  
*Peromyscus* sp. or *Onychomys* sp.  
*Neotoma* sp.  
*Microtus* sp. (large-size)  
*Mustela* sp.  
*Mephitis* sp.  
? *Bison* sp.

Note: LACM 1276 also assigned to La Brea Boulevard and 13-14th Streets, Los Angeles.

#### KINGS COUNTY

**Corcoran:** UCMP V65101  
Relative age: Rancholabrean  
Taxon: Equidae  
Source: TAXIR

**Dudley Ridge, Tulare Lake** (Witt Site, CA-Kin-32): (?= UCMP V75041)

Relative age: Rancholabrean, late Pleistocene and early Holocene\*

\*Radiometric dates: U/Th numerous dates  $65,336 \pm 3,445$  to  $11,380 \pm 70$ ,  $^{14}\text{C}$   $7,325 \pm 420$  ka BP

Taxa: *Archoplites interruptus*  
*Hysteroecarpus traskii*  
*Catostomus occidentalis*  
*Pogonichthys macrolepidotus*  
*Lavinia exilicauda*\*  
*Orthodon microlepidotus*  
*Gila crassicauda*\*  
*Acipenser* sp. either *A. transmontanus* or *A. medirostris*  
*Clemmys* sp.  
Aves  
*Homo sapiens*  
*Paramylodon harlani*  
*Lepus californicus*  
*Thomomys* sp, cf. *T. bottae*  
*Castor canadensis*  
*Canis latrans*  
*C. dirus*  
*Panthera atrox*  
*Mammuthus columbi*  
*Equus occidentalis*  
*Equus conversidens*\*  
*Camelops hesternus*\*  
*Odocoileus hemionus*\*  
*Antilocapra americana*\*  
*Bison antiquus*  
*Euceratherium collinum*\*

Source: G. Fenenga (pers. comm. 1990), Gobalet and Fenenga (1993)\*

**Tulare Lake:** UCMP V69205

Relative age: Rancholabrean  
Taxa: *Paramylodon* sp.  
cf. Proboscidea  
*Equus* sp.  
*Bison* sp.

Source: TAXIR, Harris (1985)

**Tulare Lake West** (?= Dudley Ridge): UCMP 75041

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Witt Site, Tulare Lake:** UCMP V82055

Note: Specimen/s not listed in UCMP TAXIR database.

#### LAKE COUNTY

**Kelseyville, Cash Lake:**

Geologic formation: Cache Formation  
Relative age: uncertain, Irvingtonian or Rancholabrean  
Taxa: *Mammuthus* sp.  
*Equus* sp.  
Camelidae

Source: Hay (1927)

\*Note: Reported as Cache Creek Beds.

#### LASSEN COUNTY

**Amedee, Honey Lake:** UCMP V69079

Geologic formation: reported as Lake Lahonton beds  
Relative age: Rancholabrean  
Taxon: *Camelops* sp.  
Source: TAXIR

**Bald Mountain Gravel Pit, Janesville, Honey Lake:** UCMP V69116

Note: Specimen/s not listed in UCMP TAXIR database.

**Francis** (? Honey Lake): UCMP V65075

Relative age: Rancholabrean  
Taxa: *Equus* sp.  
Camelidae  
Tayassuidae

Source: TAXIR

**Homestead Mine Road Numbers 1-6, Janesville, Honey Lake:** UCMP V65060, V65062,  
V65065-65067, V65124

Relative age: Rancholabrean  
Taxa: *Canis* sp.  
*Mammut americanum*  
*Equus* sp.  
Camelidae  
Antilocapridae  
Tayassuidae

Caprinae

Source: TAXIR

**Long Valley Number 1, Janesville, Honey Lake:** UCMP V65076

Relative age: Rancholabrean

Taxon: *Equus* sp.  
*Oreamnos* sp.

**Long Valley Creek, Honey Lake:** LACM 1341; USNM

Relative age: Rancholabrean

Taxa: *Taxidea* sp.  
*Equus occidentalis*  
Camelidae (large-size)

Source: Hay (1927)

**Secret Valley, Lichfield:** UCMP V50000

Relative age: Rancholabrean

Taxa: *Canis* sp. cf. *C. latrans*  
*Smilodon* sp. or *Panthera* sp. (large-size)  
*Mammut americanum*  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.  
*Bison latifrons*

Sources: TAXIR, McDonald (1981), Harris (1985)

**Susanville:** UCMP V52022

Relative age: Rancholabrean

Taxon: *Bison latifrons*

Source: TAXIR, McDonald (1981)

**Ulch Ranch Number 1, Susanville:** UCMP V79031

Note: Specimen/s not listed in UCMP TAXIR database.

## LOS ANGELES COUNTY

**Acton Railroad Station, Soledad Canyon:** LACM 6622

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

**Agua Amarga Canyon, Palos Verdes Hills:** LACM 3354

Relative age: Rancholabrean, ? Wisconsinan

Taxon: *Bison latifrons*

**Ainsworth and Athens Streets, Los Angeles:** LACM 3266

Relative age: Rancholabrean

Taxon: Mammalia

**Alameda Street and Sepulveda Boulevard, Carson (Watson):** LACM 1165

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: Miller (1971)

**Alameda and Workman Streets, Los Angeles** (Workman Storm Drain): LACM 1023

Relative age: Rancholabrean

Taxa: *Meleagris* sp. ? *M. californica*  
*Smilodon* sp. cf. *S. fatalis*  
*Equus* sp.  
*Odocoileus* sp. cf. *O. hemionus*

Source: Miller and DeMay (1942), Miller (1971)

**Alameda and 223rd Streets, Long Beach**: LACM 4129

Relative age: Rancholabrean

Taxa: Proboscidea  
Camelidae

**Anaheim Boulevard and Normandy Avenue, Harbor City, Los Angeles**: LACM 1158

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxa: *Equus* sp.  
*Bison* sp.

Sources: Miller (1971), Langenwalter (1975)

**Anaheim Boulevard and Vermont Avenue, San Pedro**:

Relative age: Rancholabrean

Taxon: *Tapirus* sp. cf. *T. californicus*

Sources: Stock (1944), Jefferson (1989b)

**Anaheim Street and Henery Ford Boulevard, Wilmington, Los Angeles**: LACM 1163

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: Miller (1971)

**Artesia**: LACM 1285

Relative age: ? Rancholabrean

Taxon: *Equus* sp. (small-size)

Source: Miller (1971)

**Athens on the Hill**: LACM 3365; UCMP V69208

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Note: Specimen/s not listed in UCMP TAXIR database.

**Ball Sand Pit, WALTERIA**: LACM 3265

Geologic formation: ? Palos Verdes Sand

Relative age: uncertain

Taxon: Vertebrata

**Ballona Creek Wash, Los Angeles** (= in part to Outfall Sewer): LACM 4250 (= LACM 1159, 3366-3372)

Relative age: Rancholabrean, ? in part early Holocene

Taxa: *Homo sapiens*  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.

Source: Hay (1927)

**Beacon and Second Streets, San Pedro** (Orizaba and Second Streets): LACM 1058; UCLA 1063.12

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: Aves

*Megalonyx jeffersoni*

Sources: Miller (1971), Langenwalter (1975)

**Bent Spring Canyon, Palos Verdes Hills:** LACM 65107

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: cf. *Camelops* sp.

Source: Miller (1971)

**Beverly Boulevard and Kilkea Drive, Los Angeles:** LACM 2034, 2361 Relative age: Rancholabrean

Taxa: *Mammut americanum*

*Mammuthus* sp. cf. *M. columbi*

Source: Miller (1971)

**Beverly Hills:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: J. P. Quinn (pers. comm. 1985)

**Bill and Rudy's Sand and Gravel, Walteria:** LACM 4319

Geologic formation: ? Palos Verdes Sand

Relative age: uncertain

Taxon: Camelidae

**Bixby Road between Atlantic and Orange Avenues, Long Beach:** LACM 6802

Relative age: Rancholabrean

Taxon: ? *Mammuthus* sp.

Note: Specimen not found in LACM collection.

**Bixby Park, Long Beach:** LACM 1005

Relative age: Rancholabrean

Taxon: *Mammuthus* sp. cf. *M. columbi*

Source: Miller (1971)

**Bixby Slough, Harbor City, Los Angeles (Harbor Lake):** LACM 1055

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, substage 5e (130-120 ka BP)

Taxon: *Chendytes lawi*

Source: Langenwalter (1975)

**Blue Diamond Company, Alameda and 16th Streets, Los Angeles:** LACM 2029

Relative age: Rancholabrean

Taxa: *Mammuthus* sp. cf. *M. columbi*

*Bison* sp. cf. *B. antiquus*

Source: Miller (1971)

**Bluefield, Whittier:** LACM 3347

Geologic formation: La Habra Formation

Relative age: Rancholabrean, Wisconsinan

Taxon: *Equus* sp.

**Brickyard, 13633 South Central Avenue, Los Angeles:** LACM 4685

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Centinella Park, Los Angeles:** LACM 1170

Relative age: Rancholabrean

Taxa: *Megalonyx* sp.  
*Mustela* sp. cf. *M. frenata*  
*Panthera* sp. cf. *P. atrox*  
*Platygonus* sp.  
*Capromeryx* sp.

Source: Miller (1971)

**Century Boulevard and Van Ness Avenue, Los Angeles:** SBCM 9.3.2

Relative age: Rancholabrean

Taxa: *Paramylodon* sp.  
*Thomomys bottae*  
*Mammuthus* sp.  
*Equus* sp. (large-size)  
*Bison latifrons*

**Century City, Los Angeles:** LACM 5501

Relative age: Rancholabrean

Taxa: *Taricha* sp.  
*Bufo* sp.  
*Clemmys marmorata*  
Sauria  
Colubridae  
*Podiceps nigricollis*  
Anatidae  
Charadriiformes  
*Sylvilagus* sp.  
*Thomomys bottae*  
Heteromyidae  
cf. *Peromyscus* sp.  
*Neotoma* sp.  
*Microtus californicus*  
*Canis* cf. *C. latrans*  
*Equus* sp.

Source: J. D. Stewart (pers. comm. 1989)

**Cerritos:** UCMP 2116

Geologic formation: San Pedro Sand

Note: Specimen/s not listed in UCMP TAXIR database.

**Chandler Oil Field, Puente Hills, Whittier:** CDMG

Relative age: Rancholabrean

Taxon: *Bison bison*

Source: Hay (1927)

**Chandler Sand Pit, Rolling Hills Estates:** LACM 1087

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxa: *Gavia* sp.  
*Aechmophorus occidentalis*  
*Chendytes lawi*  
*Megalonyx* sp.  
cf. *Odobenus rosmarus*\*  
Cetacea  
*Mammut americanum*  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp.  
*Tapirus* sp. cf. *T. californicus*  
*Odocoileus* sp. cf. *O. hemionus*  
*Bison* sp.

Sources: Miller (1971), Langenwalter (1975), Jefferson (1989b), R. L. Reynolds (pers. comm. 1992)\*

**Channel Street between Gaffey Street and Harbor Freeway I-110, San Pedro:** LACM 3175

Geologic formation: San Pedro Sand  
Relative age: Rancholabrean  
Taxa: *Pelecanus* sp. cf. *P. erythrorhynchos*  
*Brachyramphus* sp.

Source: Langenwalter (1975)

**Chatsworth, Plumer and Farralone Avenues:** LACM 1817

Relative age: Rancholabrean  
Taxon: *Equus* sp.

**Cherry Avenue and Spring Street, Long Beach:** LACM 1021, 1932

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.

**Compton:** LACM 3382

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.

**Concolidated Rock Company, Alameda Street near 26th Street, Los Angeles:** LACM 1157

Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
Source: Miller (1971)

**Coyote Creek (= La Mirada):** (= LACM 6689)

Note: See La Mirada, Coyote Creek.

**Crenshaw Boulevard and 236th Street, Torrance:** LACM 1839

Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: Miller (1971)

**Culver City East:**

Relative age: Rancholabrean  
Taxa: *Equus* sp.  
*Camelops* sp.  
Source: Hay (1927)

**Cypress and Slauson Avenues, Hyde Park:** LACM 1266; USNM

Relative age: Rancholabrean

Taxa: *Mammut americanum*  
*Mammuthus columbi*  
*Equus* sp.  
*Camelops hesternus*

Sources: Hay (1927), Miller (1971)

**Dacolite Quarry, WALTERIA:** LACM 1833

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Davidson Brick Quarry, Belvedere:** LACM 3363

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Decker Road, Malibu:** LACM 1682

Relative age: Rancholabrean

Taxa: *Bison* sp.

**Dominguez Hills:** LACM 1643

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Miller (1971)

**Edinburgh and 3rd Streets, Los Angeles:** LACM 1268

Relative age: Rancholabrean

Taxon: Proboscidea

Source: Miller (1971)

**Figueroa and Sepulveda Boulevards, Carson:** LACM 3823

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Frito-Lay Plant, Westchester:** LACM 3789

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

**Fort Tejon Road, east of Angeles Springs, Palmdale:** LACM(CIT) 399

Note: Specimens/s not found in LACM collection.

**Fourth and Mesa Streets, San Pedro:** LACM 7138

Relative age: Rancholabrean

Taxon: *Diomedea* sp.  
*Chendytes* sp.  
*Mammut* sp.

**Gaffey Street and Agajanian Drive, San Pedro:** LACM 3268

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Langenwalter (1975)



**Gaffey Street and Anaheim Avenue, Harbor City, Los Angeles:** LACM 1809

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: Aves

**Gaffey Street and Tenth Streets, San Pedro:** LACM 1727, 2026

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: cf. *Paramylodon* sp.

Source: Langenwalter (1975)

**Gaffey Street Union Oil Refinery Number 1, Harbor City, Los Angeles:** LACM 4205; UCMP V70004

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: *Phoca* sp. cf. *P. vitulina*

*Equus* sp.

**Harbor Boulevard and First Street, San Pedro:** LACM 3248

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Langenwalter (1975)

**Harbor Boulevard, Long Beach:** UCMP V69206

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: Aves

Source: TAXIR

**Harbor Freeway I-110, Athens, Los Angeles:** LACM 1344

Relative age: Rancholabrean

Taxa: *Spermophilus* sp. cf. *S. beecheyi*

*Mammuthus* sp.

*Capromeryx* sp.

Source: Miller (1971)

**Harbor Freeway (I-110) and 99th Street, Los Angeles:** LACM 1225

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Equus* sp.

Source: Miller (1971)

**Harbor Freeway I-110 and 112-113th Streets, Los Angeles:** LACM 1295

Relative age: Rancholabrean

Taxa: *Clemmys* sp.

*Paramylodon* sp. cf. *P. harlani*

*Thomomys* sp. cf. *T. bottae*

*Canis latrans*

*Canis* sp. cf. *C. dirus*

*Equus* sp.

*Odocoileus* sp. cf. *O. hemionus*

*Bison* sp. cf. *B. antiquus*

Source: Miller (1971)

**Hauser and 8th Streets, Los Angeles:** LACM 1724

Note: See Rancho La Brea.

**Hawthorne:** LACM 2035

Relative age: Rancholabrean

Taxon: *Mammuthus* sp. cf. *M. columbi*

Source: Miller (1971)

**Hawthorne Avenue and Pacific Coast Highway, WALTERIA:** LACM 1713

Relative age: uncertain

Taxon: Camelidae

**Hill and 12th Streets, Los Angeles:** LACM 1755

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Hilltop Quarry, Cabrillo and Gatun Streets, San Pedro:** LACM 1056

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxon: Cetacea

*Bison* sp.

Sources: Miller (1971), Langenwalter (1975)

**Hollywood:** LACM 2030

Relative age: Rancholabrean

Taxon: *Bison latifrons*

**Hyde Park, School House:** LACM 3252

Relative age: Rancholabrean

Taxon: *Bison* sp.

**Hyperion Tunnel, El Segundo:** LACM 1203

Relative age: Rancholabrean

Taxon: Mammalia

**Kester Avenue, Van Nuys:** LACM 3263

Relative age: Rancholabrean

Taxon: *Equus* sp.

**La Brea Boulevard near Pico Boulevard, Los Angeles:** LACM 1226

Relative age: Rancholabrean, ? Wisconsinan

Taxon: *Bison* sp.

**La Brea Boulevard and San Vicente Street, Los Angeles:** LACM 1783

Relative age: Rancholabrean, Wisconsinan

Taxa: *Paramylodon* sp. cf. *P. harlani*

*Equus* sp.

*Camelops* sp.

*Bison* sp.

Source: Miller (1971)

**La Brea Boulevard and Sycamore Avenue, Los Angeles:** LACM 1814

Note: See Rancho La Brea.

**La Brea and Venice Boulevards, Los Angeles:** LACM 1272

Relative age: Rancholabrean, ? Wisconsinan

Taxon: *Mammuthus* sp.

Source: Miller (1971)

**La Brea Boulevard and 13-14th Streets, Los Angeles:** LACM 1276

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: Miller (1971)

Note: LACM 1276 also assigned to Thurber Cave, Piute Mountains.

**La Cienega Boulevard, 455 near Colgate Avenue, Los Angeles:** LACM

Relative age: Rancholabrean

Taxon: *Mammut americanum*

*Bison latifrons*

Source: E. Scott (pers. comm. 1989)

Note: LACM locality number not assigned.

**La Mirada, Coyote Creek:** LACM 6689

Geologic formation: La Habra Formation

Relative age: Rancholabrean

Radiometric dates:  $^{14}\text{C}$  10,690  $\pm$  360, 8,550  $\pm$  100 yr BP

Taxa: *Rana* sp.  
*Clemmys* sp.  
Squamata  
Anatidae  
*Callipepla* sp.  
*Meleagris californica*  
*Megalonyx* sp.  
*Sylvilagus* sp.  
*Thomomys bottae*  
*Peromyscus* sp.  
*Microtus* sp. cf. *M. californicus*  
*Canis* sp. cf. *C. latrans*  
*Canis* sp. cf. *C. dirus*  
*Urocyon* sp. cf. *U. cinereoargenteus*  
*Ursus americanus*  
*Lynx* sp. cf. *L. rufus*  
Phocidae  
*Mammut americanum*  
*Equus* sp.  
*Camelops* sp. cf. *C. hesternus*  
*Odocoileus* sp. cf. *O. hemionus*  
*Bison* sp.

Sources: Miller (1971), Kurten and Anderson (1980), Welton and Finger (1981)\*

**La Mirada Numbers II-X, Coyote Creek:** LACM 4185-4187, 4195-4201 (= in part LACM 6689)

Geologic formation: La Habra Formation

Relative age: Rancholabrean, Wisconsinan

Taxon: *Equus* sp.

**Lomita:** LACM 3249  
Relative age: Rancholabrean  
Taxa: *Mammuthus columbi*  
*Equus* sp.

**Long Beach:** LACM 3260  
Relative age: Rancholabrean  
Taxon: cf. *Bison* sp.

**Long Beach, Magnolia Avenue and Ocean Boulevard:** LACM 6896  
Relative age: Rancholabrean  
Taxon: Cetacea

**Long Beach, Belmont Pier:** LACM 2031  
Relative age: Rancholabrean  
Taxa: *Tapirus* sp.  
*Bison* sp. cf. *B. antiquus*  
Sources: Miller (1971), Jefferson (1989b)

**Long Beach, Pine Avenue and 12th Streets:** LACM 3550 (= ? LACM 1144)  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxon: Pinnipedia  
Source: Langenwalter (1975)

**Long Beach, U. S. Vetrans Hospital:** LACM 3757  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxa: *Enhydra* sp.  
Cetacea  
Source: Langenwalter (1975)

**Long Wharf Canyon, Rincon del Potrero, Santa Monica:** LACM 4247; UCMP V25008  
Geologic formation: Palos Verdes Sand, "Upper San Pedro Sand"  
Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxa: *Phalacrocorax auritus*  
*Chendytes lawi* (type locality)  
Source: Miller and DeMay (1942)

**Los Angeles Brick Yard Number 3, Mission Road and Daly Street, Los Angeles:** LACM 2032; UCMP 1377  
Relative age: Rancholabrean  
Taxa: *Clemmys marmorata*  
*Paramylodon harlani*  
*Mammut americanum*  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp.  
*Camelops* sp.  
*Bison* sp.  
Sources: Hay (1927), Miller (1971)

**Los Angeles Harbor Berth Number 128:** LACM 6705

Relative age: Rancholabrean  
Taxa: *Paramylodon* sp.  
*Equus* sp.  
Source: Miller (1971)

**Los Angeles International Airport: LACM 3264**

Relative age: Rancholabrean  
Taxon: Proboscidea

**Los Angeles Police Station, Wilmington, Los Angeles: LACM 1602**

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxa: Amphibia  
*Clemmys* sp.  
Proboscidea  
*Sylvilagus* sp.  
*Thomomys bottae*  
*Peromyscus* sp.  
*Microtus* sp.  
*Canis dirus*  
*Zalophus* sp.  
Cetacea  
*Equus* sp.  
*Odocoileus* sp.  
cf. *Capromeryx* sp.

Sources: Miller (1971), Langenwalter (1975)

**Los Angeles River, Higuera Street and Moynier Lane: LACM 4232**

Relative age: Rancholabrean, ? in part early Holocene

Radiometric date:  $^{14}\text{C}$  >23,000  $\pm$  1,100 yr BP

Taxa: *Homo sapiens* ("Los Angeles Man")  
*Mammuthus* sp.

Sources: Wormington (1957), Berger *et al.* (1971), Irwin (1975)

**Los Angeles River, San Pedro:**

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: Hay (1927)

**Madison and Middlebury, Los Angeles: LACM 3250**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Magnolia Avenue and 11th Street, Long Beach (Loma Vista Drive): LACM 1144**

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: Miller (1971)

**Main and 114th Streets, Los Angeles: LACM 4206**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Malaga Cove School, Palos Verdes Estates: LACM 4928**

Relative age: Rancholabrean, ? Wisconsinan  
Taxon: *Bison* sp.

**Malaga Cove Wash, Palos Verdes Estates:** LACM 4013, 4193  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxon: *Smilodon* sp.  
Odontoceti

**Malibu:** (?= LACM 1275)  
Relative age: Rancholabrean  
Taxon: *Euceratherium* sp.  
Source: R. L. Reynolds (pers. comm. 1990)

**Malibu Creek:** LACM 1275  
Relative age: Rancholabrean, ? Holocene  
Taxon: *Equus* sp.

**Manchester and Airport Boulevards, Los Angeles:** LACM 1180, 4942  
Relative age: Rancholabrean  
Taxa: *Lepus* sp.  
cf. *Mammut* sp.  
*Mammuthus* sp.  
*Equus* sp.  
*Bison* sp.  
Source: Miller (1971)

**Manchester and Vermont Boulevards, Los Angeles:** LACM 1668  
Relative age: Rancholabrean  
Taxa: *Mammuthus* sp.  
*Equus* sp.

**Manning Rock, Irwindale:** LACM 1807  
Relative age: Rancholabrean  
Taxon: *Mammut* sp.

**Melrose Avenue and La Cienega Boulevard, Los Angeles:** LACM 2033  
Relative age: Rancholabrean  
Taxa: cf. *Geochelone* sp.  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp.  
*Camelops* sp.  
*Bison* sp.  
Source: Miller (1971)

**Mesa and Third Streets, San Pedro:** LACM 3760  
Geologic formation: San Pedro Sand  
Relative age: Rancholabrean  
Taxon: Mammalia  
Source: Langenwalter (1975)

**\*Metro Rail Wilshire Western Station:** LACM 6204  
Relative age: Rancholabrean

Taxon: *Mammuthus*  
Source: Paleo Environmental Associates (1994)

**\*Metro Rail Hollywood Tunnel:** LACM 6297, 6298, 6299

Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
*Equus occidentalis*  
*Bison antiquus*

Source: Paleo Environmental Associates (1994)

**\*Metro Rail Universal City Station:** LACM 6306, 6385, 6386; UCMP PB98002

Relative age: Rancholabrean, early Holocene

Taxon: Gasterosteridae  
*Hylidae*  
*Rana* sp.  
*Gherrnonotus* sp.  
*Uta* sp.  
*Thamnophis* sp.  
Colubridae  
*Tantilla* sp.  
Aves  
*Sorex* sp.  
*Sylvilagus*  
*Perognathus* sp.  
*Thomomys bottae*  
*Dipodomys* sp.  
*Microtus* sp.  
*Peromyscus* sp.  
*Camelops hesternus*

Source: Paleo Environmental Associates (1994)

**\*Metro Rail U.C. Station:** LACM 6970

Relative age: Rancholabrean  
Taxon: *Glossotherium harlani*  
Proboscidea  
*Camelops hesternus*  
*Bison antiquus*  
*B. Latifrons*

Source: Paleo Environmental Associates (1994)

**Michigan Street, Los Angeles:** LACM 5462

Relative age: Rancholabrean  
Taxon: *Panthera atrox*

**Miramar Street, Long Beach:** LACM 6746

Relative age: Rancholabrean  
Taxon: Proboscidea

**Mobil Oil Refinery, 190th Street, Torrance:** LACM 4444

Relative age: Rancholabrean  
Taxon: *Equus* sp.

**Naval Fuel Reserve Quarry, Harbor City, Los Angeles:** SDSNH 3246

Geologic formation: San Pedro Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxa: *Clemmys* sp.  
Colubridae  
Anatidae  
*Phalacrocorax* sp.  
? *Pelecanus* sp.  
*Sylvilagus* sp.  
*Lepus californicus*  
*Thomomys* sp.  
*Dipodomys* sp.  
*Neotoma* sp.  
*Felis* sp. (small-size)  
Cetacea  
*Equus* sp.  
*Odocoileus* sp.  
*Bison* sp. (small-size)

**Naval Housing Unit, Harbor City, Los Angeles:** LACM 5587, 5598

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxa: *Gila orcutti*  
*Gasterosteus aculeatus*  
*Leptocottus armatus*  
*Taricha* cf. *T. torosa*  
*Bufo* sp.  
*Rana* sp.  
Hylidae  
*Gerrhonotus* sp.  
Colubridae  
*Clemmys marmorata*  
*Bucephala albeola*  
*Branta canadensis*  
*Chen caerulescens*  
Galliformes  
Passeriformes  
*Notiosorex crawfordi*  
*Paramylodon harlani*  
*Sylvilagus* sp.  
*Thomomys bottae*  
*Microtus californicus*  
*Peromyscus californicus* or *P. eremicus*  
*Perognathus* cf. *P. formosus*  
*Dipodomys* cf. *D. agilis*  
Cetacea  
*Equus* sp.  
*Camelops* sp.  
*Bison* sp.

Source: J. D. Stewart (pers. comm. 1989)

Note: Numbered field localities included.

**New Lumber Yard, San Pedro:** UCMP V66137

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)



Note: Specimen/s not listed in UCMP TAXIR database.

**Norelle Street, Los Angeles:** LACM 1279

Relative age: Rancholabrean, ? Holocene

Taxon: *Equus* sp.

**Olympic Boulevard and Alvira Street, Los Angeles:** LACM 1238

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Miller (1971)

**Orange Avenue and Spring Street, Long Beach:** LACM 1022

Note: Specimen/s not found in LACM collection.

**Outfall Sewer, Culver City:** LACM 3372

Relative age: Rancholabrean

Taxa: *Thomomys bottae*

*Equus* sp.

*Camelops* sp.

*Odocoileus* sp.

*Bison antiquus*

**Outfall Sewer, Angeles Mesa, Culver City:** LACM 1159

Relative age: ? Holocene

Taxon: *Homo sapiens* ("Haverty Men")

Source: Stock (1924), Wormington (1957)

**Outfall Sewer, Limpo and Exposition, Culver City:** LACM 3366

Relative age: Rancholabrean

Taxon: *Camelops* sp.

**Outfall Sewer, Rodeo and Kelley, Culver City:** LACM 3367

Relative age: Rancholabrean

Taxon: *Mammut* sp.

**Outfall Sewer North, Sabertooth, Culver City:** LACM 3370

Relative age: Rancholabrean

Taxon: *Smilodon* sp.

Note: Specimen not found in LACM collection.

**Outfall Sewer North, Section 10, Culver City:** LACM 3369

Relative age: Rancholabrean

Taxon: ? Equidae

**Outfall Sewer North, Section 15, Culver City:** LACM 3368

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Outfall Sewer North, Trench 19, Culver City:** LACM 3371

Relative age: Rancholabrean

Taxon: *Bison antiquus*

**Pacific Avenue and Oliver Street, San Pedro:** LACM 186

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: *Clemmys* sp.  
*Puffinus griseus*  
*Canis* sp. cf. *C. dirus*  
*Zalophus* sp.  
*Equus* sp.

Source: Langenwalter (1975)

**Pacific Avenue and Second Street, San Pedro:** LACM 4537

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxon: *Chendytes lawi*

**Pacific Avenue and Second and Third Streets, San Pedro:** LACM 3251

Relative age: Rancholabrean  
Taxon: *Equus* sp.

**Palos Verdes Hills** (general locality): LACM 3258

Geologic formation: ? Palos Verdes Sand  
Relative age: Rancholabrean, ? Sangamon, ? Wisconsinan  
Taxa: Aves  
Cetacea  
*Mammuthus* sp.  
*Equus* sp.  
*Bison* sp.

**Palos Verdes Hills, Green Hills Memorial Park:** LACM 1228, 3200

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: *Paramylodon* sp.  
cf. *Camelops* sp.  
*Bison* sp.

Source: Miller (1971), Langenwalter (1975)

**Palos Verdes Hills, Western Avenue and Westmount Drive:** LACM(CIT) 484

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxa: *Eumetopias* sp.  
*Mirounga* sp. cf. *M. angustirostris*

Sources: Miller (1971), Langenwalter (1975)

**\*Park La Brea A:** LACM

Relative age: late Pleistocene, Rancholabrean  
Taxa: Anura  
? *Thamnophis* sp.  
Aves  
*Paramylodon harlani*  
*Spilogale* sp.  
*Sylvilagus audubonii*  
*Thomomys* sp.  
*Dipodomys* sp.  
*Peromyscus* sp.

*Microtus californicus*  
*Neotoma* sp.  
*Mammuthus columbi*  
*Equus occidentalis*  
*Bison antiquus*

Source: Paleo Environmental Associates (2001a)

**\*Park La Brea B:** LACM

Relative age: late Pleistocene, Rancholabrean

Taxa: *Paramylodon harlani*  
Proboscidea  
*Equus occidentalis*  
*Camelops hesternus*

Source: Paleo Environmental Associates (2001b)

**Paseo Del Mar Street, Palos Verdes Estates:** LACM 1876

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: *Bison antiquus*

Source: Miller (1971)

**Pine Avenue and 12th Streets, Long Beach:** LACM 3550 (=? LACM 1144, same locality name)

Relative age: Rancholabrean, Wisconsinan

Taxon: Camelidae

Source: Langenwalter (1975)

**Pixie Avenue and Cover Street, Lakewood:** LACM 3660

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Playa del Rey, Del Rey Hills, Lincoln Avenue** (Lincoln Boulevard): LACM 1024

Relative age: Rancholabrean

Taxon: *Gavia* sp. aff. *G. immer*  
*Aechmophorus occidentalis*  
*Diomedea albatrus*  
*Puffinus griseus*  
*P. opisthomelas*  
*Sula reykana* (type locality)  
*Chendytes lawi*  
Anatidae  
*Uria aalge*  
*Corvus corax*  
*Phoca* sp. cf. *P. vitulina*

Source: Howard (1936b), Miller and DeMay (1942), Barnes and Mitchell (1975)

**Rancho La Brea:** LACM 1724 (Hauser and 8th Streets), 1814 (La Brea Boulevard and Sycamore Avenue), 1870 and 7247 (Wilshire Boulevard and Curson Avenue), 1933 and 6909 (Hancock Park), 4204 and 6910 (Wilshire Boulevard, Mutual Benefit Building), 4590 (Stanley and 8th Streets), 6911 and 7027 (Wilshire Boulevard, Prudential Building); UCMP 1058-1061, 2050-2053, 3874

Relative age: Rancholabrean, Wisconsinan, in part early Holocene Radiometric dates: numerous determinations, U/Th and <sup>14</sup>C ≥40 to 9 ka BP

Taxa: *Onchorhynchus mykiss*

*Gila orcutti*  
*Gasterosteus aculeatus*  
*Aneides* sp.  
*Bufo nestor* (type locality)  
*B. boreas*  
*B. microscaphus*  
*Hyla* sp.  
*Rana* sp.  
*Clemmys marmorata*  
cf. *Geochelone* \*  
*Gerrhonotus multicarinatus*  
*Sceloporus magister*  
*S. occidentalis*  
*Uta stansburiana*  
*Phrynosoma coronatum*  
*Eumeces skiltonianus*  
*Cnemidophorus tigris*  
*Anniella* sp. \*  
*Diadophis punctatus*  
*Hypsiglena torquata*  
*Tantilla* sp.  
*Arizona elegans*  
*Coluber constrictor*  
*Masticophis lateralis*  
*Pituophis melanoleucus catenifer*  
*Lampropeltis getulus*  
*Lampropeltis* sp.  
*Rhinocheilus* sp.  
*Thamnophis* sp. cf. *T. couchii*  
*T. sirtalis*  
*Thamnophis* sp.  
*Crotalus viridis*  
*Crotalus* sp.  
*Podilymbus podiceps*  
*Podiceps* sp.  
*Phalacrocorax* sp.  
*Botaurus lentiginosus*  
*Ardea herodias*  
*Casmerodius albus*  
*Egretta thula*  
*E. caerulea*  
*Butorides striatus*  
*Nycticorax nycticorax*  
*Plegadis chihi*  
*Ajaia ajaja*  
*Cygnus columbianus*  
*Anser albifrons*  
*Chen caerulescens*  
*C. sp. ? C. rossii*  
*Branta canadensis*  
*B. sp. cf. B. bernicla*  
*Anas platyrhynchos*  
*A. strepera*

*A. crecca*  
*A. cyanoptera*  
*A. clypeata*  
*Aythya valisineria*  
*Anabernicula gracilenta*  
*Ciconia maltha* (type locality)  
*Mycteria wetmorei* (type locality)  
*Teratornis merriami* (type locality)  
*Cathartornis gracilis* (type locality)  
*Coragyps occidentalis*  
*Cathartes aura*  
*Gymnogyps amplus* (type locality)  
*Breagyps clarki* (type locality)  
*Elanus caeruleus*  
*Haliaeetus leucocephalus*  
*Circus cyaneus*  
*Accipiter gentilis*  
*A. striatus velox*  
*A. cooperii*  
*Buteogallus fragilis* (type locality)  
*Buteo jamaicensis*  
*B. swainsoni*  
*B. lagopus*  
*B. regalis*  
*Buteo* sp.  
*Aquila chrysaetos*  
*Amplibuteo woodwardi*  
*Wetmoregyps daggetti* (type locality)  
*Spizaetus grinnelli* (type locality)  
*Neogyps errans* (type locality)  
*Neophrontops americanus* (type locality)  
*Falco sparverius*  
*F. columbarius*  
*F. peregrinus*  
*F. mexicanus*  
*Falco* sp.  
*Polyborus plancus* (type locality)  
*Meleagris californica* (type locality)  
*Callipepla californica*  
*Fulica americana*  
*Grus canadensis* (type locality)  
*G. americana*  
*Pluvialis squatarola*  
*Charadrius vociferus*  
*Recurvirostra americana*  
*Tringa melanoleuca*  
*Catoptrophorus semipalmatus*  
*Numenius americanus*  
*N. phaeopus*  
*Limosa fedoa*  
*Calidris alba*  
*C. alpina*  
*Limnodromus griseus*

*Gallinago gallinago delicata*  
*Phalaropus fulicarius*  
*Larus canus*  
*Rissa tridactyla*  
*Columba fasciata*  
*Zenaida macroura*  
*Ectopistes migratorius*  
*Geococcyx californianus*  
*Tyto alba*  
*Otus kennicotti*  
*Bubo virginianus*  
*Glaucidium gnoma*  
*Athene cunicularia*  
*Strix brea* (type locality)  
*Asio flammeus*  
*Aegolius acadicus*  
*Phalaenoptilus nuttallii*  
*Melanerpes lewis*  
*Sphyrapicus* sp.  
*Picoides* sp.  
*Colaptes auratus cafer*  
*Dryocopus pileatus*  
*Tyrannus* sp. ? *T. vociferans*  
*Eremophila alpestris*  
*Cyanocitta stelleri*  
*Aphelocoma coerulescens*  
*A.* sp. cf. *A. californica*  
*Nucifraga columbiana*  
*Pica nuttalli*  
*Corvus corax*  
*C. cryptoleucus*  
*C. brachyrhynchus*  
*C. caurinus*  
*Sialia* sp. cf. *S. mexicana*  
*Turdus migratorius*  
*Parus* sp. cf. *P. gambeli*  
*Oreoscoptes montanus*  
*Toxostoma redivivum*  
*Bombycilla cedrorum*  
*Lanius ludovicianus*  
*Parulinae* gen. sp. indet.  
*Pheucticus melanocephalus*  
*Pipilo erythrophthalmus*  
*P. fuscus*  
*P. angelensis* (type locality)  
*Spizella passerina*  
*Spizella* sp.  
*Poocetes gramineus*  
*Chondestes grammacus*  
*Amphispiza bilineata*  
*A. belli*  
*Passerella iliaca*  
*Melospiza melodia*

*Zonotrichia leucophrys*  
*Agelaius* sp. ? *A. phoeniceus californicus*  
*Sturnella neglecta*  
*Xanthocephalus* sp.  
*Euphagus magnirostris*  
*Molothrus ater*  
*Icterus* spp.  
*Pandanaris convexa* (type locality)  
*Carduelis pinus*  
*C. tristis*  
*Coccothraustes vespertinus*  
*Sorex ornatus*  
*Notiosorex crawfordi*  
*Scapanus latimanus*  
*Lasiurus cinereus*  
*Antrozous pallidus*  
*Homo sapiens* ("La Brea Woman")  
*Megalonyx jeffersonii*  
*Nothrotheriops shastensis*  
*Paramylodon harlani*  
*Sylvilagus audubonii*  
*S. bachmani*  
*Lepus californicus*  
*Spermophilus beecheyi*  
*Tamias* sp.  
*Thomomys bottae*  
*Dipodomys agilis*  
*Perognathus californicus*  
*Reithrodontomys megalotis*  
*Peromyscus imperfectus* (type locality)  
*Onychomys torridus*  
*Neotoma* sp.  
*Microtus californicus*  
*Canis latrans*  
*C. lupus*  
*C. dirus*  
*C. familiaris*  
*Urocyon cinereoargenteus*  
*Arctodus simus*  
*Ursus americanus*  
*U. arctos horribilis*  
*Procyon lotor*  
*Bassariscus astutus*  
*Mustela frenata*  
*Taxidea taxus*  
*Spilogale putorius*  
*Mephitis mephitis*  
*Smilodon brevipes* (type locality)  
*S. fatalis*  
*Homotherium serum*  
*Panthera atrox*  
*P. onca agusta*  
*Felis concolor*

*F. daggetti* (type locality)  
*Felis* sp. (small-size)  
*Lynx rufus*  
 Cetacea (human artifact)  
*Mammut americanum*  
*Mammuthus columbi*  
*Equus occidentalis*  
*E. conversidens*  
*Tapirus californicus*  
*Platygonus* sp. cf. *P. compressus*  
*Camelops hesternus*  
*Hemiauchenia macrocephala*  
*Odocoileus* sp. cf. *O. hemionus*  
*Cervus* sp. cf. *C. elaphus* (human artifact)  
*Capromeryx minor* (type locality)  
*Antilocapra americana*  
*Bison latifrons*  
*B. antiquus*  
*Bos* sp. (? historic)  
 Bovidae (historic)  
*Euceratherium* sp. ? *E. collinum*  
*Ovis aries* (historic)  
 ? *O. canadensis*

Sources: Bovard (1907), Merriam (1909, 1910, 1911a, 1911b, 1912a, 1912b, 1913a, 1913b, 1913c, 1918a, 1918b), Miller (1909a, 1909b, 1910a, 1910b, 1910c, 1911a, 1915, 1916a, 1916b, 1916c, 1925, 1932), Taylor (1911), Kellogg (1912), Stock (1913, 1917, 1918, 1925, 1938), Chandler (1914, 1916a, 1916b), Camp (1917), Husband (1924), Dice (1925), Merriam and Stock (1921, 1925, 1932), Howard (1927, 1928, 1929, 1930, 1932, 1933, 1935, 1936a, 1937, 1938, 1942, 1949, 1962, 1974), Sushkin (1935), Compton (1937), Miller and Howard (1938), Howard and Miller (1939), Silby (1939a, 1939b), Furlong (1941, 1946), Miller and DeMay (1942), Fisher (1944, 1947), Dawson (1948), Savage (1951), Brattstrom (1953), Kurten (1960), Marcus (1960), Miller (1968), Irwin (1975), Akersten *et al.* (1979), Cox (1979), Swift (1979, 1989), Rea (1980), Bromage and Shermis (1981), Campbell (pers. comm. 1982), Jefferson (1983a, 1986a, 1989b), LaDuke (1983), Marcus and Berger (1984), Reynolds (1985), A. Tejada-Flores (pers. comm. 1985, 1987), S.M. Cox (pers. comm. 1989), Whistler (1989), N. Czaplewski (pers. comm. 1990), R. L. Reynolds (pers. comm. 1990), Scott (1990), Jefferson and Tejada-Flores (1991)\*, Duckler (1996)\*, Owen (1966)\*, Gust (1997, 2003, 2007)\*, Scott (1997)\*, Spencer *et al.* (1999)\*, Spencer *et al.* (2001), Binder *et al.* (2002), Spencer *et al.* (2002)\*, Wheeler (2002)\*, Wheeler and Jefferson (2003)\*, Anyonge *et al.* (2003)\*, Fox-Dobbs *et al.* (2003)\*, Harris *et al.* (2003, 2007)\*, Spencer *et al.* (2003)\*, VanValkenburgh *et al.* (2004)\*, Wheeler and Jefferson (2005), Jett *et al.* (2005)\*, Agenbroad and Brunelle (2005)\*, Fox-Bobbs *et al.* (2006)\*, Bochenski and Campbell (2006); Friscia *et al.* (2008), Binder and Meachen (2008)\*, Feranec, R., E. Hadley, and A. Paytan (2008)\*, Syverson, V. and D. Prothro 2008\*, Taylor and Dundas (2009)\*, Wheeler and Jefferson (2009)\*, Binder and Van Valkenburg (2010)\*

Note: The listed "Bovidae (historic)" above is a modern, African taxon (A. Tejada-Flores pers. comm. 1985)

**Redondo Steam Generating Plant**, Redondo Beach: LACM 1254, 3064

Relative age: Rancholabrean

Taxon: Cetacea  
*Hemiauchenia* sp.

Source: Miller (1971)

**Rolling Hills Estates, Pennsylvania Avenue between Chandler and Sidebotham Sand Pits**: LACM 1277

Geologic formation: Palos Verdes Sand



Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxon: Cetacea  
Source: Langenwalter (1975)

**San Clemente Island:** LACM 1669  
Relative age: Rancholabrean  
Taxon: cf. *Lissodelphis* sp.

**San Jose Hills, Pearblossom:** UCMP V72102  
Relative age: ? Rancholabrean  
Taxon: Megalonychidae  
Source: TAXIR

**San Fernando Dam:** USGS 1224  
Relative age: Rancholabrean  
Taxon: *Paramylodon* sp.

**San Pedro:**  
Relative age: Rancholabrean  
Taxon: *Mammuthus columbi*  
Source: Hay (1927)

**San Pedro, Gaffey Street and Harbor Freeway I-110:** LACM 3270 (= ? UCMP V7004)  
Geologic formation: San Pedro Sand  
Relative age: Rancholabrean  
Taxon: *Eschrichtius* sp. cf. *E. robustus*  
Source: Barnes and McLeod (1984)

**San Pedro, Gaffey Street and Harbor Freeway I-110:** UCMP V7004 (= ? LACM 3270)  
Geologic formation: San Pedro Sand  
Relative age: Rancholabrean  
Taxon: *Phoca* sp. cf. *P. vitulina*  
Source: Barnes and Mitchell (1975)

**San Pedro Lumber Company, Hill 48, San Pedro** (?= San Pedro Lumber Yard): LACM 187 (= ? LACM 1026, 1057); UCMP 2047  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: *Gasterosteus aculeatus*  
*Bufo* sp.  
cf. *Rana* sp.  
*Taricha* sp.  
*Clemmys* sp.  
*Pituophis melanoleucus catenifer*  
*Lampropeltis getulus*  
*Crotalus viridis*  
*Gavia immer*  
*G. pacifica*  
*Podiceps* sp. ? *P. auritus*  
*Podiceps nigricollis*  
*Aechmophorus occidentalis*  
*Diomedea nigripes*  
*D. albatrus*

*Diomedea* sp.  
*Puffinus griseus*  
*P. opisthomela*  
*Fulmarus glacialis*  
*Phalacrocorax auritus*  
*P. penicillatus*  
*Branta canadensis*  
*B. sp. ? B. bernicla*  
*Anser albifrons*  
*Anas platyrhynchos*  
*A. crecca*  
*A. clypeata*  
*A. americana*  
*Bucephala albeola*  
*Melanitta fuscua*  
*M. perspicillata*  
*Chendytes lawi*  
*Cathartes aura*  
*Coragyps* sp.  
*Haliaeetus leucocephalus*  
*Falco sparverius*  
*Fulica americana*  
*Limosa* sp. ? *L. fedoa*  
*Tringa* sp.  
*Larus glaucescens*  
*Synthliboramphus antiquus*  
*Ptychoramphus aleuticus*  
*Callipepla californica*  
*Sturnella neglecta*  
*Nothrotheriops* sp. cf. *N. shastensis*  
*Megalonyx* sp.  
*Sylvilagus* sp. cf. *S. bachmani*  
*Lepus* sp.  
*Spermophilus beecheyi*  
*Thomomys bottae*  
*Microtus* sp. cf. *M. californicus*  
*Neotoma* sp. cf. *N. fuscipes*  
*Canis* sp. ? *C. dirus*  
*Smilodon fatalis*  
*Panthera* sp. cf. *P. atrox*  
*Felis* sp. cf. *F. concolor*  
*Enhydra* sp. cf. *E. lutris*  
Arctocephalinae  
*Zalophus californicus*  
Delphinidae  
Mysticeti  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.  
*Odocoileus* sp. cf. *O. hemionus*  
*Capromeryx* sp.  
*Bison* sp. cf. *B. latifrons*  
*Bison* sp.

Sources: Miller and DeMay (1942), Miller (1971), Langenwalter (1975), Kurten and Anderson (1980)

**San Pedro Lumber Yard, San Pedro** (?= San Pedro Lumber, Hill 48): LACM 1026, 1057 (= LACM 187; UCMP 2047)

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxa: *Gavia* sp. ? *G. immer*  
*Gavia* sp.  
*Aechmophorus occidentalis*  
*Diomedea* sp.  
*Puffinus griseus*  
*P. opisthomelas*  
*Fulmarus glacialis*  
*Phalacrocorax* sp. ? *P. penicillatus*  
*Branta canadensis*  
*Anser albifrons*  
*Anas platyrhynchos*  
*A. crecca*  
*A. cyanoptera*  
*Melanitta perspicillata*  
*Chendytes lawi*  
*Cathartes aura*  
*Haliaeetus leucocephalus*  
*Callipepla californica*  
*Larus glaucescens*  
*Synthliboramphus antiquus*  
*Sturnella neglecta*  
*Megalonyx* sp.  
Leporidae  
? *Smilodon* sp.  
*Felis* sp.  
Otariidae  
*Mammuthus* sp.  
*Equus* sp.  
Camelidae  
*Bison* sp.

Sources: Miller and DeMay (1942), Miller (1971), Kurten and Anderson (1980)

**San Pedro, Upper San Pedro:** UCMP 1371

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Santa Monica Freeway I-10, Gramercy Street, Los Angeles:** LACM 1893

Relative age: Rancholabrean

Taxa: cf. *Mammuthus* sp.  
*Bison* sp. cf. *B. antiquus*

Source: Miller (1971)

**Santa Susana Pass, Chatsworth:** LACM 1406

Relative age: ? Rancholabrean

Taxon: *Mammut* sp.

**Signal Hill, Long Beach:** UCMP V65109

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Signal Hill North, Long Beach:** UCMP V69207

Note: Specimen/s not listed in UCMP TAXIR database.

**Sparklets Mammoth, Lincoln Boulevard and 45th Street, Pasadena (Eagle Rock Mammoth):**

LACM(CIT) 342, LACM 2027

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Bison* sp.

Source: Miller (1971)

**Stanley and 8th Street, Los Angeles:** LACM 4590

Note: See Rancho La Brea.

**Sylmar:** LACM 5745

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Equus* sp.

**\*The Grove at Farmers Market:** LACM 7478

Relative age: late Pleistocene, Rancholabrean

Taxon: *Thomomys* sp.

Source: Paleo Environmental Associates (2001)

**Terminal Island, San Pedro:** LACM 4587

Relative age: Rancholabrean

Taxa: Edentata

Carnivora

Cetacea

**Tremaine and 8th Streets, Los Angeles:** LACM 1198

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Miller (1971)

**Torrance Recharge Basin, Torrance:** LACM 1893

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Torrance Sand and Gravel Company, Crenshaw and Pacific Coast Highway:** LACM 65118

Relative age: Rancholabrean

Taxon: Cetacea

**Torrance Sand and Gravel Company, Rolling Hills Estates:** LACM 1271

Relative age: Rancholabrean

Taxon: Proboscidea

**U. S. Veterans Hospital, Long Beach:** LACM 3757

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: cf. *Clemmys* sp.  
Squamata  
*Gavia* sp.  
*Chendytes lawi*  
*Thomomys* sp.  
*Canis* sp. cf. *C. latrans*  
*Equus* sp.  
*Hemiauchenia* sp.  
Source: Langenwalter (1975)

**Union Oil 76 Refinery Number 2, Los Angeles Harbor Yard, San Pedro:** LACM 3262, LACMIP 1210;  
LACMIP 1210; UCMP V70027 (B6411)  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: *Thomomys* sp.  
Otariidae  
*Camelops* sp.  
Source: Langenwalter (1975)  
Note: Specimen/s not listed in UCMP TAXIR database.

**Van Norman Reservoir, Lower:** LACM 7152  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.

**Van Norman Reservoir, Upper:** LACM 3397  
Relative age: Rancholabrean  
Taxon: *Bison* sp.

**Van Nuys Clay Pit:** LACM 3822  
Relative age: Rancholabrean  
Taxon: *Bison* sp.

**Venice Boulevard and Vineyard Avenue, Los Angeles:** LACM 7137  
Relative age: Rancholabrean  
Taxon: *Bison* sp.

**\*Walnut Creek, San Dimas:** (? Pomona College)  
Geologic formation: Dan Dimas Formation  
Relative age: Pleistocene  
Taxon: *Mammuthus* sp. ? *M. imperator*  
Source: Clarke (1979)

**Wicks Street, Arrow Rock, Los Angeles (Sun Valley):** LACM 1146  
Relative age: Rancholabrean  
Taxon: *Equus* sp.

**Wilmington, Lomita Boulevard and Main Street (Wilmington Boulevard):** LACM 3085  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, substage 5e (130-120 ka BP)  
Taxon: Delphinidae  
Source: Langenwalter (1975)

**Wilmington Avenue, Dominguez Hills:** LACM 1919

Relative age: Rancholabrean  
Taxon: *cf. Mammuthus* sp.  
Source: Miller (1971)

**Wilmington Boulevard and San Pedro Road, San Pedro:** LACM 1012

Geologic formation: San Pedro Sand  
Relative age: Rancholabrean  
Taxon: *Branta* sp.  
*Fulica* sp.  
Rodentia  
Source: Langenwalter (1975)

**Wilshire Boulevard and Bedford, Los Angeles:** LACM 3355 (= LACM 3821)

Relative age: Rancholabrean  
Taxon: *Equus* sp.

**Wilshire Boulevard and Curson Avenue, Los Angeles:** LACM 1870, 7247

Note: See Rancho La Brea.

**Wilshire Boulevard and La Cienega, Los Angeles:** LACM 1679, 3176

Relative age: Rancholabrean, in part Holocene  
Taxa: *Bison* sp.  
*Bos* sp.  
Note: *Bos* sp. is historic.

**Wilshire Boulevard, Mutual Benefit Building, Los Angeles:** LACM 4204, 6910

Note: See Rancho La Brea.

**Wilshire Boulevard and Orange Grove Drive, Los Angeles:** LACM 1604

Relative age: Rancholabrean  
Taxon: *Bison* sp. cf. *B. antiquus*  
Source: Miller (1971)

**Wilshire Boulevard Prudential Building, Los Angeles:** LACM 6911, 7027

Note: See Rancho La Brea.

**Wilshire Boulevard, 10580 The Wilshire, Los Angeles:** LACM 5833

Relative age: Rancholabrean  
Taxa: *Thomomys* sp.  
*Dipodomys* sp.  
*Neotoma* sp.  
*Microtus* sp.  
*Equus* sp.

**Woodland Hills, Canoga Park:** LACM 1213

Relative age: Rancholabrean  
Taxon: *Paramylodon* sp.

**York Valley, Avenue 45 and Lincoln Avenue, Highland Park, Los Angeles:**

Relative age: Rancholabrean  
Taxon: *Meleagris californica*

Source(s): Miller (1942a), Lundelius *et al.* (1983)

**Zuma Creek, Point Dume:** LACM 1754

Relative age: Rancholabrean, Wisconsinan

Taxa: *Clemmys* sp.  
*Chendytes* sp.  
*Puffinus griseus*  
*P. opisthomelas*  
*Fulmarus glacialis*  
Alcidae  
Sulidae  
*Gavia stellata*  
*Podiceps caspius*  
*Phalacrocorax pennicillatus*  
*Aythya americana*  
*A. marila*  
*A. affinis*  
*Oxyura jamaicensis*  
*Fulica americana*  
*Corvus corax*  
*Larus occidentalis*  
*L. canus*  
*Bucephala albeola*  
*Meleagris californica*  
*Callipepla californica*  
*Synthliboramphus antiquus*  
*Melanitta perspicillata*  
*Uria aalge*  
*Scapanus* sp.  
Leporidae  
Geomyidae  
Cricetidae  
Microtine  
*Equus* sp.  
*Tapirus* sp. cf. *T. californicus*  
*Odocoileus* sp.

Sources: Kurten and Anderson (1980), Lundelius *et al.* (1983), Jefferson (1989b)

#### MADERA COUNTY

**Ash Slough, Chowchilla:** LACM 7254

Relative age: uncertain

Taxon: Proboscidea

**Chowchilla:** MC

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: L. Harville (pers. comm. 1989)

**Madera, Millerton:**

Relative age: Rancholabrean

Taxa: *Mammut* sp.  
*Mammuthus* sp.

*Bison latifrons*

Source: Hay (1927)

MARIN COUNTY

**Hamlet Station:** UCMP V65147

Relative age: Rancholabrean

Taxon: *Paramylodon harlani*

Source: TAXIR

**San Antonio Creek:** UCMP V28042

Relative age: Rancholabrean

Taxa: *Mammuth americanum*

*Mammuthus columbi*

*Bison* sp.

Source: TAXIR

**Weisman Locality:** UCMP V51006

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

MARIPOSA COUNTY

**Hornitos:** UCMP 1368

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Equus* sp.

Source: Taxir, Hay (1927)

**Hornitos North:** UCMP V65036, V69181

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: TAXIR

**Horseshoe Bend, Merced River:**

Relative age: Rancholabrean

Taxon: *Mammuth americanum*

Source: Hay (1927)

MERCED COUNTY

**Bear Creek, Indian Creek:**

Relative age: Rancholabrean

Taxa: ? *Equus* sp. (small-size)

*Camelops* sp.

cf. *Odocoileus* sp.

Source: Hay (1927)

**Cistern, Planada:** UCMP V67224

Geologic formation: Riverbank Formation

Note: Specimen/s not listed in UCMP TAXIR database.



**Dry Creek:**

Relative age: uncertain

Taxa: *Equus* sp.  
*Camelops* sp.  
Cervidae

Source: Hay (1927)

**Halimar:** UCMP V69194

Note: Specimen/s not listed in UCMP TAXIR database.

**Merced County:** UCMP 2049

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: TAXIR

**Merced Falls:** UCMP V69172

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: TAXIR

**Merced River Number 1, Halimar:** UCMP V68006

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*  
*Equus* sp.  
*Camelops* sp.  
*Bison* sp.

Source: TAXIR

**Planada:** MC

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.  
*Camelops* sp.

Source: M. Arguelles and L. Harville (pers. comm. 1989)

**Thompson, near Gustine:** UCMP V37020

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR

MODOC COUNTY

**B+K Ranch:** UCMP V50037

Relative age: ? Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR

**Cedarville:** UCMP V66029

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR

**John Street Gravel Pit:** UCMP V60037

Relative age: Rancholabrean

Taxon: *Symbos* sp.  
Source: TAXIR

MODOC or SISKIYOU COUNTY

**Tule Lake:** UCMP V61009  
Relative age: Rancholabrean  
Taxon: Proboscidea

MONTEREY COUNTY

**Harlem Siding:** UCMP V40002  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Lake Heinz:** UCMP V55076  
Relative age: Rancholabrean  
Taxon: *Bison latifrons*  
Source: TAXIR

**Moss Landing:** UCMP V49015  
Relative age: Rancholabrean  
Taxon: *Camelops* sp.  
Source: TAXIR

**Soledad Crossing:** UCMP V48056  
Relative age: Rancholabrean  
Taxon: Camelidae  
Source: TAXIR

NEVADA COUNTY

**Penn Valley:** SCGD  
Relative age: Rancholabrean  
Taxon: *Bison latifrons*  
Source: R. Hilton (pers. comm. 1989)

ORANGE COUNTY

**Anaheim Boulevard and 19th Street, Costa Mesa:** LACM 3267  
Relative age: Rancholabrean  
Taxon: Proboscidea

**Bonita Creek, Costa Mesa:** LACM 1068  
Geologic formation: Palos Verdes Sand  
Relative age: <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: *Sylvilagus* sp.  
*Equus* sp.  
*Tapirus* sp. cf. *T. californicus*  
*Camelops* sp.  
*Odocoileus* sp. cf. *O. hemionus*  
*Bison* sp.

Sources: Miller (1971), Jefferson (1989b)

**Brea Canyon Wash:** LACM 1270

Relative age: ? Rancholabrean or Holocene

Taxon: *Bos* sp. (historic)  
*Ovis* sp. or *Capra* sp. (? historic)

Note: Site may be entirely historic.

**Central Park West:** (Orange County facility)

Relative age: Rancholabrean

Age estimate: 30 kyr

Radiometric date:

Taxa: *Cathartes* sp.  
*Paramylodon harlani*  
*Mammuthus* sp.  
*Bison* sp.

Source: K. Scott in S. Smith (2006)

**Costa Mesa:** LACM 1339

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Costeau Pit, Laguna Hills, El Toro:** LACM 65129

Relative age: Rancholabrean, Wisconsinan

Radiometric date: <sup>14</sup>C ≥40,000 yr BP

Taxa: *Bufo boreas*  
*Rana aurora*  
*Aneides lugubris*  
cf. *Clemmys marmorata*  
*Gopherus* sp.  
Squamata  
*Sceloporus* sp.  
*Cnemidophorus* sp.  
*Crotalus viridis*  
*Pituophis melanoleucas*  
*Anas* sp.  
*Buteogallus* sp.  
*Callipepla* sp.  
*Fulica* sp. cf. *F. americana*  
*Athene* sp.  
Passeriformes  
*Notiosorex crawfordi*  
*Paramylodon* sp. cf. *P. harlani*  
*Sylvilagus* sp. cf. *S. bachmani*  
*S. audubonii*  
*Lepus* sp. cf. *L. californicus*  
*Spermophilus beecheyi*  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp. cf. *P. californicus*  
*Reithrodontomys* sp. cf. *R. humulus*  
*Peromyscus maniculatus*  
*Neotoma* sp.

*Microtus* sp.  
*Ondatra* sp.  
*Canis* sp. cf. *C. latrans*  
*Canis* sp. cf. *C. dirus*  
*Mustela frenata*  
*Smilodon* sp. cf. *S. fatalis*  
*Mammuthus columbi*  
*Equus* sp. (large-size)  
cf. *Equus* sp. (small-size)  
*Camelops* sp. cf. *C. hesternus*  
*Hemiauchenia* sp.  
Cervidae  
*Capromeryx* sp.  
*Bison latifrons*  
*B. antiquus*

Sources: Brattstrom (1971), Miller (1971), Kurten and Anderson (1980), McDonald (1981), Langenwalter (1986)

**Dana Point:** LACM 4535, USGS 1426

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.  
*Bison* sp.

**Emery Borrow Pit, Ralph Clark Regional Park, Fullerton:** LACM 3536-3537, 4178, 7053-7054, 7088-7089; RCIC LC-47\*

Geologic formation: La Habra Formation

Relative age: ? late Irvingtonian through Rancholabrean

Taxa: *Gila orcutti*  
*Bufo nestor* (type locality)  
*B. boreas*  
*Rana aurora*  
*Hyla* sp.  
*Tarichia* sp.  
*Clemmys marmorata*  
*Pseudemys scripta*  
*Gerrhonotus multicarinatus*  
*Xantusia vigilis*  
*Sceloporus magister*  
*S. occidentalis*  
*Uta stansburiana*  
*Phrynosoma coronatum*  
*Phrynosoma* sp.  
*Eumeces skiltonianus*  
*Cnemidophorus* sp.  
*Hypsiglena torquata*  
*Coluber* sp.  
*Trimorphodon biscutatus*  
*Masticophis lateralis*  
*Pituophis melanoleucus catenifer*  
*Lampropeltis getulus*  
*Crotalus viridis*  
*Podiceps* sp.  
*Podylimbus* sp.

*Pelicanus erythrorhynchus*  
*Phalacrocorax* sp.  
*Chen* sp.  
*Branta canadensis*  
*B.* sp. cf. *B. bernicla*  
*Anas acuta*  
*A. platyrhynchos*  
*A. strepera*  
*A. crecca*  
*A. clypeata*  
*Aythya affinis*  
*Cathartes aura*  
*Accipiter striatus*  
*Buteo jamaicensis*  
*Falco* sp.  
*Polyborus plancus*  
*Callipepla californica*  
*Fulica americana*  
*Fulica* sp.  
*Grus* sp.  
*Charadrius vociferus*  
*Tyto alba*  
*Meleagris* sp.  
*Gallinula* sp.  
*Rallus* sp.  
*Scapanus* sp. cf. *S. latimanus*  
*Megalonyx* sp.  
*Sylvilagus bachmani*  
*Lepus* sp.  
*Spermophilus beecheyi*  
*Thomomys bottae*  
*Peromyscus* sp.  
*Sigmodon* sp.  
*Neotoma lepida*  
*Microtus californicus*  
*Canis* sp. cf. *C. latrans*  
cf. *Urocyon* sp.  
*Bassariscus* sp. cf. *B. astutus*  
*Mephitis* sp.  
*Lynx* sp.  
*Mammut americanum*  
*Mammuthus* sp. cf. *M. imperator*  
*Equus* sp. cf. *E. occidentalis*  
*Tapirus merriami*  
cf. *Tayassuidae*  
*Camelops hesternus*  
*Paleolama* sp. aff. *P. mirifica*  
*Odocoileus hemionus*  
*Cervus elaphus*  
Antilocapridae ? *Antilocapra* sp.  
Bovidae ? *Bootherium* sp. or *Bison* sp.

Sources: Kurten and Anderson (1980), S. W. Conkling (pers. comm. 1988), Jefferson (1989b), L. Babilonia (pers. comm. 2003)

Note: Irvingtonian taxa included.

**\*Forster Ranch: \*\***

Geologic formation: \*\*

Relative age: \*\*

Taxon: *Nothrotheriops shastensis*

Source: Stadium (1996)

**Fullerton: LACM 3356, 6472**

Geologic formation: La Habra Formation

Relative age: Rancholabrean, Wisconsinan

Taxon: *Equus* sp.

Source: Miller (1971)

**Galivan: USGS 1209**

Relative age: Rancholabrean

Taxon: *Bison* sp.

**General McArthur Boulevard and Bison Avenue, Newport Beach: LACM 4426**

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, substage 5e (130-120 ka BP)

Taxon: Aves

**General McArthur Boulevard, Newport Bay Mesa, Newport Beach: LACM 3407, 4254**

Geologic formation: ? San Pedro Sand

Relative age: Rancholabrean

Taxon: *Chendytes* sp.

*Mammuthus* sp.

**General McArthur Boulevard Bridge, Newport Bay Mesa, Newport Beach: LACM 1089, LACMIP 160**

Relative age: Rancholabrean

Taxon: Edentata

**Glasell and Fletcher, Orange: LACM 4943**

Relative age: Rancholabrean

Taxon: *Equus* sp.

**\*Hicks Canyon: LSA Associates**

Relative age: Rancholabrean

Taxa: *Paramylodon* sp.

*Mammut* sp.

*Mammuthus* sp.

*Tapirus californicus*

*Equus* sp.

*Bison* sp.

Source: S. Conkling (pers. comm. 1996)

**Huntington Beach: LACM 65113**

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Bison* sp.

Source: Miller (1971)

**Imperial Highway, La Habra: LACM 1052**

Geologic formation: La Habra Formation  
Relative age: Rancholabrean, Wisconsinan  
Taxa: *Meleagris californica*  
*Paramylodon* sp. cf. *P. harlani*  
*Mammut* sp. cf. *M. americanum*  
*Mammuthus columbi*  
*Equus* sp.  
cf. *Camelops* sp.  
*Odocoileus* sp.  
*Antilocapra* sp.  
Source: Miller and DeMay (1942), Miller (1971)

**Imperial Highway, La Habra:** LACM 3538  
Geologic formation: La Habra Formation  
Relative age: Rancholabrean, Wisconsinan  
Taxon: *Mammuthus* sp.

**Irvine Company Dam:** LACM 1069, LACMIP 69  
Relative age: ? Rancholabrean  
Taxon: Mammalia  
Note: Specimen not found in LACM collection.

**Kelly Pits, Palisades Road, Newport Beach:** LACM 6475  
Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)  
Taxa: Anura  
*Clemmys* sp.  
Reptilia  
Aves  
*Thomomys* sp.  
*Dipodomys* sp.  
Carnivora  
*Equus* sp.

**Laguna Beach:** W. H. Wilson private collection, Laguna Beach, California  
Relative age: ? early Holocene  
Radiometric date: <sup>14</sup>C 17,150 ± 1,470 yr BP  
Taxon: *Homo sapiens*  
Source: Irwin (1975)

**Laguna Hills, Morland Tract:** LACM 4849  
Relative age: Rancholabrean  
Taxa: *Equus* sp.  
*Camelops* sp.  
*Bison* sp.

**Laguna Niguel:** LACM 4628-4629  
Relative age: Rancholabrean  
Taxa: *Mammuthus* sp.  
*Equus* sp.  
*Tapirus* sp. cf. *T. californicus*  
*Bison* sp.  
Source: Jefferson (1989b)

**Malvern Avenue, Fullerton:** LACM 3524  
Geologic formation: La Habra Formation  
Relative age: Rancholabrean, Wisconsinan  
Taxon: Ungulata

**Mateo Siding, La Habra:** UCMP V70005  
Note: Specimen/s not listed in UCMP TAXIR database.

**Newport Bay Mesa, Newport Beach:** LACM 1066-1067, 1100, 1240, 3877

Geologic formation: Palos Verdes Sand  
Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxa: *Hyla regilla*  
*Bufo boreas*  
*Rana aurora*  
cf. *Taricha* sp.  
*Aneides lugubris*  
*Chelonia mydas*  
*Thamnophis* sp.  
*Lampropeltis getulus*  
*Masticophis flagellum*  
*Crotalus viridis*  
*Aythya* sp. cf. *A. affinis*  
*Accipiter* sp.  
*Callipepla* sp.  
*Corvus* sp.  
*Agelaius* sp.  
*Sorex ornatus*  
*Notiosorex crawfordi*  
*Scapanus latimanus*  
*Antrozous pallidus*  
*Megalonyx* sp. cf. *M. jeffersonii*  
*Nothrotheriops shastensis*  
*Sylvilagus* sp. cf. *S. audubonii*  
*S. bachmani*  
*Spermophilus* sp. cf. *S. beecheyi*  
*Thomomys bottae*  
*Dipodomys* sp. cf. *D. agilis*  
*Perognathus californicus*  
*Reithrodontomys megalotis*  
*Peromyscus* sp. cf. *P. crinitus*  
*P. maniculatus*  
*Neotoma fuscipes*  
*Microtus californicus*  
*Canis* sp. cf. *C. dirus*  
cf. *Spilogale* sp.  
*Enhydra lutris*  
Otariidae  
*Mirounga* sp. cf. *M. angustirostris*  
*Lagenorhynchus* sp.  
Mysticeti  
*Mammut americanum*  
Mammutidae and/or Elephantidae



*Equus* sp. (large-size)  
*Equus* sp. (small-size)  
*Tapirus merriami*  
*Tapirus* sp. cf. *T. californicus*  
*Camelops* sp.  
*Hemiauchenia* sp.  
*Odocoileus* sp. cf. *O. hemionus*  
*Antilocapra americana*  
*Bison* sp. cf. *B. antiquus*  
*Bison* sp. cf. *B. latifrons*

Sources: Miller (1971), Reynolds (1976), Hudson and Brattstrom (1977), Kurten and Anderson (1980), Jefferson (1989b)

**Newport Bay, Newport Beach:** UCMP V79082 (= UCMP A3104)

Geologic formation: ? Palos Verdes Sand

Relative age: Rancholabrean

Taxon: Aves

Source: TAXIR

**Newport Beach:** LACM 6801

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxon: *Tapirus merriami*

Source: Jefferson (1989b)

**Newport Beach:** UCMP V72104 (B-5462)

Note: Specimen/s not listed in UCMP TAXIR database.

**Oceanview High School, Seal Beach:** LACM 4018

Relative age: Rancholabrean

Taxon: *Odocoileus* sp.

**Oso Creek, Mission Viejo:** LACM 1215, 4119

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Miller (1971)

**\*Pacific City, Huntington Beach:**

Relative age: Rancholabrean

Radiometric date: 40,980 ± 800, 19,890 ± 120 <sup>14</sup>C yr BP

Taxa: Osteichthyes  
Amphibia  
Aves  
Mammalia (small)  
*Mammuthus* sp.  
*Equus* sp.  
*Bison* sp.

Note: dates are from two deposits, and the small vertebrates are from the older site

Source: Roeder (2009)

**\*Park Place:** (LSA Associates Inc.)

Relative age: late Rancholabrean

Radiometric dates: 15,853 ± 81 and 14,713 ± 71 <sup>14</sup>C yr BP

Taxa: Osteichthyes  
Mylobatidae  
Iguanidae  
Colubridae  
Crotalidae  
*Clemmys marmorata*  
Aves (raptors)  
*Paramylodon harlani*  
*Microtus* sp.  
*Neotoma* sp.  
*Mustela frenata*  
*Urocyon cinereoargenteus*  
*Vulpes fulva*  
*Canis dirus*  
*C. latrans*  
*Ursus americanus* (*Euarctos*)  
*Panthera onca*  
*Felis concolor*  
*Lynx rufus*  
*Smilodon fatalis* (*S. californicus*)  
*Mammuthus columbi*  
*Equus* sp.  
*Camelops* sp.  
*Capromeryx minor*  
*Paleolama* sp.  
*Camelops hesternus*  
*Bison antiquus*  
*B. latifrons*

Sources: Reynolds and Buffington (2003a, 2003b), Staley (2003a, 2003b, 2007)

Notes: *Panthera atrox* removed see Staley (2007)

**Rio Vista Avenue, Anaheim:** LACM 1652

Relative age: ? Holocene

Taxon: *Ovis* sp.

**Salt Creek, Laguna Niguel:** NHFOC, RCIC LC

Relative age: Rancholabrean

Taxa: *Paramylodon* sp.

*Mammut* sp.

*Mammuthus* sp.

? *Tapirus* sp.

*Equus* sp. (large-size)

Source: Jefferson (1989b)

**Salt Creek, San Joaquin Hills:** LACM 1115; NHFOC

Relative age: Rancholabrean

Taxa: Edentata

Rodentia

*Mammuthus* sp. cf. *M. columbi*

Source: Miller (1971)

**San Clemente, Forster Ranch Tract 12895:** RCIC LC-72

Relative age: Rancholabrean

Taxa: Chelonia\*  
Rodentia\*  
*Paramylodon* sp.  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.  
*Bison* sp.\*

Sources: S. W. Conkling (pers. comm. 1989), Brock *et al.* (1992)\*

**\*San Clemente, Tsuma Property:** RCIC LC-101-103

Age estimate: <32,000 to >10,000 yr BP

Taxa: Osteichthyes  
Plethodontidae  
*Gerrhonotus multicaeratus*  
*Pituophis melanoleucus*  
*Tantilla* sp.  
*Thamnophis* sp. cf. *T. couchii*  
*Lampropeltis getulus*  
*Salvadora* sp. or *Coluber constrictor*  
*Lophortyx californicus*  
*Zonotrichia* sp.  
*Sorex* sp. cf. *S. ornatus*  
*Sorex* sp.  
cf. *Sorex* sp.  
? *Scapanus* sp.  
*Sylvilagus* sp.  
*Thomomys* sp.  
cf. *Thomomys* sp.  
*Perognathus* sp.  
cf. *Dipodomys* sp.  
*Peromyscus* sp. cf. *P. boylii*  
*Peromyscus* sp. cf. *P. maniculatus*  
*Peromyscus* sp.  
cf. *Peromyscus* sp.  
*Microtus californicus*

Source: Brock *et al.* (1992)\*

**\*San Clemente:** (San Clemente City Hall)

Relative age: Rancholabrean

Taxa: *Nothrotheriops* sp.  
*Mammuthus* sp.  
*Equus* sp. cf. *E. occidentalis*  
*Bison* sp. cf. *B. latifrons*

Source: M. Morgan (RMW Paleo Associates) (pers. comm. 1995)

**\*San Clemente State Beach:** DPR P-254

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: G. Farris (DPR Archaeology Laboratory) (pers. comm. 2001)

**San Juan Capistrano:** USGS 1428

Relative age: Rancholabrean

Taxon: cf. *Tursiops* sp.

**\*Santa Isabel, Costa Mesa:** UCMPV 93124

Geologic formation: Palos Verdes Sand

Relative age: Rancholabrean, <sup>18</sup>O substage 5e (130-120 ka BP)

Taxa: *Heterodontus francisci*  
*Squatina californica*  
*Alopias vulpinus*  
*Carcharodon carcharias*  
*Isurus oxyrinchus*  
*Mustelus californicus*  
*M. henlei*  
*Triakis semifasciata*  
*Galeorhinus galeus*  
*Carcharinus brachyurus*  
*Rizoprionodon longurio*  
*Rhinobatos productus*  
*Platyrhinoidis triseriata*  
*Raja* sp.  
*Urolophus halleri*  
*Mylobatus californica*  
*Sardinops sagax*  
*Engraulis mordax*  
*Microgadus proximus*  
*Merluccius productus*  
*Chilara taylori*  
*Ophidion scrippsae*  
*Porichthys notatus*  
*Atherinopsis californiensis*  
*Sebastes diploproa*  
*S. helvomaculatus*  
*S. jordani*  
*Ophiodon elongatus*  
*Leptocottus armatus*  
*Calamus brachysomus*  
*Atractoscion nobilis*  
*Genyonemus lineatus*  
*Umbrina roncadore*  
*Seriphus politus*  
*Damalichthys vacca*  
*Cymatogaster aggregata*  
*Sphyraena argentea*  
*Semicossyphus pulcher*  
*Lepidogobius lepidus*  
*Paralichthys californicus*  
*Clemmys marmorata*  
*Gavia* sp.  
*Uria aalge*  
*Diomedea* sp.  
*Puffinus* sp.  
Lagomorpha  
*Enhydra lutris*  
*Eumetopias jubatus*  
*Zalophus californianus*  
*Equus* sp.

*Camelops* sp.  
*Bison* sp.

Source: Long (1993)

**Seal Beach Offshore:** LACM 1121

Relative age: Rancholabrean

Taxa: *Mammuthus* sp. cf. *M. columbi*  
*Bison* sp. cf. *B. latifrons*

Source: Miller (1971)

**Seal Beach near 15th Street:** LACM 1409

Relative age: Rancholabrean

Taxon: *Mammuthus* sp. cf. *M. columbi*

Source: Miller (1971)

**Shea Homes Tract 12544, Golden Lantern and Third Street, Laguna Niguel:** NHFOC

Relative age: Rancholabrean

Taxon: *Equus* sp. (large-size)

**Shea Homes Tract 12544 Lot 401, Laguna Niguel:** NHFOC

Relative age: Rancholabrean

Taxon: *Odocoileus hemionus*

**Sulphur Creek Reservoir:** LACM 4543

Relative age: Rancholabrean

Taxon: *Bison* sp.

**Sunset Beach, Anderson Street and Pacific Coast Highway:** LACM 3291

Relative age: Rancholabrean

Taxon: *Camelops hesternus*

**\*Sun-Cal, Olinda Heights:** RCIC-LC

Relative age: Rancholabrean

Taxon: *Tapirus californicus*

Source: Roeder pers. comm. (2001)

**West Coyote Oil Field, Fullerton (Murphy-Coyote 328):** LACM 3861

Geologic formation: San Pedro Sand

Relative age: Rancholabrean

Taxon: *Chendytes* sp.

Source: Welton and Finger (1981) \*

#### PLACER COUNTY

**Michigan Bluff, Forest Hill:**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Hay (1927)

**Rattlesnake Mine, Deadwood:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**Rocklin:** UCMP V69052  
Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
Source: TAXIR

**Roseville:** SCGD  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: R. Hilton (pers. comm. 1989)

#### RIVERSIDE COUNTY

**Auld Valley, Bachelor Mountain:** LACM 7261  
Geologic formation: Pauba Formation  
Relative age: late Irvingtonian or early Rancholabrean  
Taxon: Proboscidea

**Bastenchury Ranch, Granite Mountains:** UCMP V70007  
Note: Specimen/s not listed in UCMP TAXIR database.

**Beaumont:** AMNH  
Relative age: Rancholabrean  
Taxon: *Bison antiquus*  
Sources: McDonald (1981), Harris (1985), Jefferson (1986b)

**Bedford Properties:** SBCM 5.6.229-5.6.246, 5.6.250-5.6.258  
Geologic formation: Pauba Formation  
Relative age: ? Rancholabrean  
Taxa: *Gasterosteus aculeatus*  
*Gila* sp.  
*Bufo* sp.  
*Rana* sp.  
? *Chelonia* (small)  
? *Uta stansburiana*  
*Umeces* sp.  
? *Lampropeltis* sp.  
Crotalidae  
Aves (small)  
*Sylvilagus* sp. *S. audubonii*  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp.  
*Reithrodontomys* sp.  
*Peromyscus* sp.  
*Neotoma* sp.  
*Microtus californicus*  
cf. *Vulpes* sp.  
Carnivora (medium-size)  
*Mammut americanum*  
*Mammuthus* sp.  
*Camelops* sp.  
Artiodactyla (medium-size)

**Blythe:** UCMP V60004

Note: Specimen/s not listed in UCMP TAXIR database.

**Corona:** LACM 1207

Relative age: ? Rancholabrean

Taxon: *Odocoileus* sp.

**Corona, Santa Ana River:** UCRV 8601

Relative age: Rancholabrean

Taxa: Osteichthyes  
Sauria  
Lagomorpha  
*Microtus* sp.  
*Mammut* sp.  
*Equus* sp.  
cf. *Camelops* sp.  
*Bison* sp.

Source: M. O. Woodburne (pers. comm. 1986)

**Costain Homes:** LACM 5904

Relative age: Irvingtonian, ? Rancholabrean

Geologic formation: Pauba formation

Taxa: Leporidae  
*Thomomys* sp.

**\*Diamond Valley, Hemet** (East Side Reservoir Project, Domenigioni Valley, Valley of the Mastodons):

SBCM (2581 localities)

Radiometric dates: 46 to 41 ka, 41,490 ± 1,380 to 13,200 <sup>14</sup>C yr BP

Relative age: Rancholabrean

Taxa: *Scaphiopus* sp.  
*Bufo* sp. cf. *B. boreas*  
*Pseudacris* spp.  
*Actinemys (Clemmys) marmorata*  
*Gopherus agasizii*  
Iguanidae  
*Phrynosoma* sp.  
*Cnemidophorus* sp.  
*Crotalus* sp.  
*Anas* sp.  
Accipitridae (? *Aquila chrysaetos*)  
*Falco* sp.  
Phasianidae (? *Meleagris gallopavo*)  
*Callipepla* sp.  
Scolopacidae  
*Asio* sp. (? *A. flammeus*)  
*Colaptes auratus*  
Hirundinidae  
cf. *Turdus migratorius*  
Corvidae (jay-sized)  
Corvidae (magpie-sized)  
cf. *Sturnella neglecta*  
*Sorex* sp.

*Scapanus* sp.  
*Myotis* sp.  
*Megalonyx jeffersoni*  
*Nothrotheriops shastensis*  
*Paramylodon harlani*  
*Sylvilagus* sp.  
*Lepus californicus*  
*Eutamias* sp.  
*Spermophilus beecheyi*  
*Spermophilus* sp. (small-sized)  
*Thomomys bottae*  
*Dipodomys* sp. (large-sized)  
*Dipodomys* sp. (small-sized)  
*Perognathus* sp. (large-sized)  
*Peromyscus* sp. cf. *P. crinitus*  
*Neotoma lepida*  
*N. fuscipes*  
*Microtus californicus*  
*Mustela* sp. cf. *M. frenata*  
? *Taxidea taxus*  
*Canis dirus*  
*C. latrans*  
*Urocyon cinereoagenteus*  
*Ursus americanus*  
cf. *Arctodus* sp.  
*Panthera atrox*  
*Lynx*  
*Smilodon fatalis*  
*Mammut americanum*  
*Mammuthus columbi*  
*Equus conversidens*  
*Equus* sp. E. "occidentalis"  
*Platygonus compressus*  
*Camelops hesternus*  
*Hemiauchenia*  
*Odocoileus* sp.  
Cervidae (*Cervus* or *Navahoceros*-size)  
*Antilocapra*  
*Bison antiquus*  
*B. latifrons*

Sources: Scott (1997, pers. comm.), Springer *et al.* (1998), Springer *et al.* (1999, 2007), Anderson *et al.* (2002), Sagebiel *et al.* (2004.2005), Springer *et al.* (2009)

**Jack Rabbit Trail Gravel Pit, San Jacinto Valley:** LACM 4540

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Jefferson (1986b)

**Lake View Hot Springs:** SBCM 5.3.151\*

Relative age: Rancholabrean

Taxa: Anura (small)\*

*Clemmys* sp.

Colubridae\*



*Crotalus* sp.\*  
Aves\*  
Sciuridae\*  
*Dipodomys* sp.\*  
*Thomomys bottae*  
*Microtus* sp.\*  
*Smilodon* sp.\*  
*Mammuthus* sp.  
*Equus* sp. cf. *E. occidentalis*\*  
*Odocoileus* sp.\*

Source: Reynolds and Reynolds (1991a)\*

\***La Quinta:** LACM 6252, 6253, 6255; LACMIP 16830, 16831

Relative age: mid-Holocene

Geologic formation: Lake Cahuilla beds

Radiometric dates: 5,890 ± 60 to 1,125 ± 80 yr BP <sup>14</sup>C

Taxa: ? *Cyprinodon macularius*  
*Gila elegans*  
*Xyrauchen texanus*  
*Phrynosoma platyrhynchos*  
*Secloporus magister*  
*Uma inornata*  
*Urosaurus graciosus*  
*Chionactis occipitalis*  
*Hypsiglena torquata*  
*Pituophis melanoleucus*  
*Sonoran semiannulata*  
*Crotalus cerastes*  
*Crotalus* sp. (large size)  
*Sylvilagus* sp.  
*Ammospermophilus leucurus*  
*Perognathus* sp.  
? *Dipodomys* sp.  
*Neotoma lepida*  
*Peromyscus* sp.

Source: Whistler *et al.* (1995)

\***Miles Avenue Bridge:** ABDSP 3233

Relative age: late Pleistocene and early Holocene

Geologic formation: Lake Cahuilla beds

Taxa: *Cyprinodon* sp.  
Cyprinodontiformes  
*Gila elegans*?  
*Gila* sp.  
*Xyrauchen texanus*  
*Mugil cephalus*  
Phrynosomatidae  
Colubridae  
Rodentia  
*Ovis canadensis*

Source: Lander (2010)

\***Mountain View Country Club, La Quinta:** RMM LA Q LV-034

Relative age: late Pleistocene  
Geologic formation: Lake Cahuilla beds  
Age estimate: 12.3 kyr

Taxa: *Gila* sp.  
Catostomid  
cf. *Ranna* sp. or *Hyla* sp.  
*Ambystoma trigrins*  
*Sceloporus* sp.  
*Phrynosoma* sp.  
? *Sauromalus* sp.  
*Thamnophis* sp.  
*Lampropeltis* sp.  
*Pituophis* sp.  
*Crotalus* sp.  
Fringillidae  
*Otus* sp.  
cf. *Anas* sp. (small)  
Aves (large)  
*Notiosorex crawfordi*  
*Sylvilagus* sp. cf. *S. auduboni*  
*Sylvilagus* sp. (small)  
*Lepus californicus*  
*Ammospermophilus leucurus*  
*Citellus* sp. cf. *C. tereticaudus*  
*Spermophilus* sp. cf. *S. beechyi*  
*Mictorus* sp.  
*Ondatra zibethicus*  
*Perognathus* sp. cf. *P. penicillatus*  
*Perognathus* sp. (large)  
*Dipodomys* sp. cf. *D. deserti*  
*D.* sp. cf. *D. merriami*  
*Thomomys bottae*  
*Peromyscus* sp. cf. *P. eremicus*  
*Neotoma* sp. cf. *N. lepida*  
*N.* sp. cf. *N. fuscipes*  
Mustelidae  
*Taxidea* sp.  
*Canis latrans*

Source: Reynolds (2008)

Note: Reynolds (2008) also list invertebrate taxa; taxa suggest Holocene age

**\*Pauba Mesa:** SBCM 05.006.390-391

Geologic formation: Pauba Formation

Relative age: Rancholabrean

Radiometric dates:  $^{14}\text{C}$  >40,300 and  $33,470 \pm 710$

Taxon: *Paramylodon harlani*

Source: McDonald (1993)

**Pinto Basin, Joshua Tree National Monument:** UCRARU CaRiv 521-522; LACM(CIT) 208, LACM 3414, JOTR (SBCM)

Geologic formation: Pinto formation (informal)

Relative age: late Pleistocene, ? Rancholabrean

\*Taxa: *Anas* sp.

cf. Accipitridae  
*Lepus* sp.  
cf. *Taxidea taxus*  
*Canis* sp.  
*Mammuthus* sp.  
*Equus* sp. (large-size)  
*Equus* sp. (small-size)  
*Odocoileus* sp.  
cf. *Capromeryx* sp.  
*Camelops* sp.  
*Hemiauchenia* sp.  
*Camelops* sp.  
*Ovis* sp.  
\**Bison* sp.

Sources: Campbell and Campbell (1935), Jefferson (1972, 1986b, 1991b), Schroth (1990), Scott (2003),  
\*Springer et al. (2004), \*Scott et al. (2009a, 2009b)

**Rancho California, Corporate Park V** (?= Santa Gertrudis Creek): LACM 5447

Geologic formation: Pauba Formation

Relative age: late Irvingtonian or early Rancholabrean

Taxon: *Equus* sp. (large-size)

*Camelops* sp.

cf. *Hemiauchenia macrocephala*

Source: Raschke (1986)

**Rancho California, Margarita Village Tracts 20735, 20802, 21082**: LACM 5464

Geologic formation: Pauba Formation

Relative age: late Irvingtonian or early Rancholabrean

Taxon: Rodentia

? *Mammuthus* sp.

*Equus* sp.

*Camelops* sp.

Cervidae or Antilocapridae

*Bison* sp.

Source: Raschke (1987)

**Rancho California, Mesa Homes Tracts 21672-21673**: LACM (locality number not assigned)

Geologic formation: Pauba Formation

Relative age: late Irvingtonian or early Rancholabrean

Taxa: *Equus* sp.

Source: Morgan and Raschke (1988a)

**Rancho California, Warmington Homes Tracts 20735, 20737-20739, 20881**: LACM

Geologic formation: Pauba Formation

Relative age: late Irvingtonian or early Rancholabrean

Taxon: *Equus* sp.

*Camelops* sp.

Source: Morgan and Raschke (1988b)

Note: LACM locality numbers not assigned.

**Riverside**: UCMP V65248

Relative age: uncertain, Irvingtonian or Rancholabrean

Taxon: *Mammuthus* sp.

**\*Salt Creek Channel, Winchester:**

Taxon: *Mammuthus* sp.  
Source: Kennedy (pers. comm. 2004)

**Santa Ana River, Thompson Sand Pit:** RMM; R. Kirkby private collection, Rubidoux, California

Relative age: Rancholabrean  
Taxa: *Paramylodon harlani*  
*Mammuthus* sp.  
*\*Mammuthus meridionalis*  
*M. columbi*  
*Equus* sp.  
Source: R. Kirkby (pers. comm. 1965)

**Santa Gertrudis Creek, Rancho California** (?= Rancho California, Corporate Park V: (?= LACM 5447)

Relative age: Irvingtonian or Rancholabrean  
Geologic formation: Pauba Formation  
Taxa: *Tapirus* sp.  
*Equus* sp.  
Sources: Mann (1955), Raschke (1986), Jefferson (1989a)  
SACRAMENTO COUNTY

**\*ARCO Arena** (Sacramento Sports Stadium): SCNHM

Relative age: Rancholabrean, Illinoian or Wisconsinan  
Geological formation: Riverbank Formation  
Taxa: *Paramylodon harlani*  
cf. *Sciurus* sp.  
*Canis* sp. cf. *C. latrans*  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops hesternus*  
Cervidae or Antilocapridae  
*Bison antiquus*  
Sources: R. Hamilton (pers. comm. 1989), Jefferson (1991), Hilton *et al.* (2000)

**Chicken Ranch Slough Numbers 1-2, Sacramento:** UCMP V68046, V68141

Relative age: Rancholabrean  
Taxon: *Mammuthus columbi*  
*Equus* sp.  
Source: TAXIR

**Davis Gravel Pit, Sacramento:** UCMP V67047

Geologic formation: Riverbank Formation  
Relative age: Rancholabrean  
Radiometric dates: U/Th 186 to 45 ka BP  
Taxa: Proboscidea  
*Equus* sp.  
*Camelops hesternus*  
Source: TAXIR, Hansen and Begg (1970)

**Ehrhardt Avenue, Sacramento:** UCMP V74086

Geologic formation: Riverbank Formation  
Note: Specimen/s not listed in UCMP TAXIR database.

**Sacramento:** SDSNH 0663  
Relative age: Rancholabrean  
Taxa: *Equus* sp. (small-size)  
*Equus* sp.  
cf. *Camelops* sp.  
Cervidae

**Teichart Gravel Pit Numbers 1-2, Sacramento:** UCMP V69129, V75126

Geologic formation: Riverbank Formation

Relative age: Rancholabrean

Radiometric dates: U/Th 112 to 67 ka BP

Taxa: Cyprinidae  
*Rana* sp.  
Colubridae  
*Clemmys marmorata*  
Anatidae  
*Scapanus latimanus*  
*Paramylodon harlani*  
*Sylvilagus* sp.  
*Spermophilus* sp. cf. *S. beecheyi*  
*Thomomys bottae*  
*Perognathus* sp.  
*Reithrodontomys* sp.  
*Neotoma* sp.  
*Microtus* sp.  
*Canis latrans*  
*C. dirus*  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops hesternus*  
*Odocoileus* sp.  
*Bison* sp. cf. *B. antiquus*

Sources: TAXIR, Hansen and Begg (1970), Harris (1985)

#### SAN BENITO COUNTY

**Abbe Ranch, San Benito River Valley:** UCMP V69064

Geologic formation: San Benito Gravels

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Bengard Ranch, King City:** UCMP V69003

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: TAXIR

**Bird Creek, San Benito River Valley:** UCMP 69068

Geologic formation: San Benito Gravels

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: TAXIR

**Hollister Gravel Pit, Hollister:** UCMP V69065  
Geologic formation: San Benito Gravels  
Relative age: Rancholabrean  
Taxon: ? *Mammuthus* sp.  
Source: TAXIR

**Sallee Ranch, San Benito River Valley:** UCMP V69063  
Geologic formation: San Benito Gravels  
Relative age: Rancholabrean  
Taxon: *Mammuthus columbi*  
Source: TAXIR

SAN BERNARDINO COUNTY

**Antelope Cave, Ivanpah Mountains:** SBCM 1.10.10

Relative age: Rancholabrean  
Radiometric date:  $^{14}\text{C}$  10,080  $\pm$  160 yr BP

Taxa: *Gila* sp.\*  
*Gopherus agassizi*  
*Celonyx variegatus*  
*Phrynosoma platyrhinos*\*  
*Gambelia wislizenii*\*  
*Sauromalus obesus*\*  
*Sceloporus* sp.  
*Cnemidophorus tigris*\*  
*Eumeces* sp. cf. *E. gilberti*\*  
*Crotophytus collaris*\*  
Colubridae\*  
*Crotalus* sp.  
*Gymnogyps californicus*  
*Accipiter cooperii*\*  
*Buteo* sp. cf. *B. jamaicensis*\*  
Anatidae  
*Turdus migratorius*\*  
*Icterus* sp.\*  
*Myotis subblatus leibii*\*  
*Myotis* sp. (large-sized)\*  
*Antrozous pallidus*\*  
*Sorex* sp.  
*Notiosorex crawfordi*  
*Ochotona princeps*  
*Sylvilagus* sp. cf. *S. audubonii*  
*Sylvilagus* sp. ? *S. bachmani*  
*Lepus californicus*  
*Eutamias panamintinus*  
*Eutamias* sp. (large-sized)  
*Marmota* sp. cf. *M. flaviventris*  
*Spermophilus variegatus*  
*Spermophilus* sp. (A)  
*Spermophilus* sp. (B)  
*Ammospermophilus* sp. cf. *A. leucurus*  
*Thomomys bottae*

*Dipodomys* sp.  
*Perognathus* (*Perognathus*) sp.  
*Perognathus* (*Chaetodippus*) sp.  
*Peromyscus* (*Peromyscus*) sp.  
*Peromyscus* (*Haplomyiomys*) sp.  
*Neotoma lepida*  
*Neotoma* sp. (small-size)  
*Neotoma* sp. (large-size)  
*Microtus californicus*  
*Lagurus curtatus*  
*Canis latrans*  
*Ursus americanus*  
*Mustela frenata*  
*Spilogale putorius*  
*\*Equus* sp. (*\*Equus conversidens*)  
*Camelops* sp. cf. *C. hesternus*  
Cervidae ? *Navajoceros* sp.  
*Antilocapra americana*  
*Ovis canadensis*

Sources: Pitzer (1985), R. E. Reynolds *et al.* (1991), Jefferson (1991b), Reynolds *et al.* (1991)\*, Scott (1997, 2000)\*

**Archer, Cadiz Dry Lake:** SBCM 1.24.2-1.24.5

Relative age: late Irvingtonian or early Rancholabrean

Taxa: Amphibia  
Reptilia  
*Phrynosoma* sp.  
Aves  
*Lepus californicus*  
*Lepus* sp.\*  
*Sylvilagus* sp.\*  
*Thomomys bottae*\*  
*Perognathus* sp.  
*Dipodomys ordii*  
*Dipodomys* sp.\*  
*Peromyscus* sp.  
*Neotoma* cf. *N. lepida*\*  
*Neotoma* sp.\*  
*Reithrodontomys megalotis*\*

Source: Jefferson (1991b), Reynolds (1991a), Reynolds and Reynolds (1992)\*

**Awl Site, Drinkwater Basin:**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Sources: M. G. Cottrell (pers. comm. 1988), Jefferson (1989a)

**Bedford Road, Harvard Hill:** SBCM 1.76.17

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Jefferson (1989a)

**Big Bear Cutoff and Mojave River, Hesperia:** LACM

Relative age: uncertain, Irvingtonian or Rancholabrean

Taxon: *Mammuthus* sp.  
Source: Jefferson (1986b)  
Note: Specimen not found in collection, and LACM locality number not assigned.

**Bitter Springs Playa, Rodgers Ridge, Fort Irwin:** SBCM 1.72.10

Relative age: Rancholabrean

Taxa: *Gopherus* sp.  
*Crotalus* sp.\*  
*Lepus* sp.  
*Sylvilagus* sp.\*  
*Spermophilus* sp. nr. *S. tereticaudus*\*  
cf. *Thomomys* sp.\*  
cf. *Perognathus* sp. (small-size)\*  
*Dipodomys* sp. cf. *D. merriami*\*  
*Neotoma* sp. cf. *N. lepida*\*  
*Microtus* sp.\*  
*Canis latrans*\*  
*Canis dirus*\*  
*Canis* sp. (*C. lupus*-size)\*  
*Actodus simus*\*  
*Panthera atrox*\*  
*Smilodon* sp.\*  
*Mammuthus* sp. cf. *M. columbi*\*  
*Equus conversidens*  
*Equus* sp. (large-size)  
? *Camelops* sp.  
*Hemiauchenia* sp.  
*Odocoileus* sp.\*  
Bovidae (medium-size)\*

Sources: Reynolds and Woodburne (1987, 1989), Jefferson (1989, 1990a), Reynolds and Reynolds (1994)\*, Scott (1997, 2000\*)

**Black Butte, Newberry:** SBCM 37, 1.76.14

Relative age: ? Rancholabrean

Taxa: ? *Mammut* sp.  
*Mammuthus* sp.  
*Camelops* sp. (large-size)  
*Artiodactyla* (small-size)

Source: Jefferson (1989a)

**Broadwell Lake:** SBCM 01.058.031-01.058.034, 01.058.036-01.058.037

Relative age: Rancholabrean

Taxon: *Gopherus* sp.

Source: Jefferson (1991)\*

**Broadwell Lake East:** SBCM 01.053.006

Relative age: Rancholabrean

Taxon: cf. *Vulpes* sp.

**Broadwell Lake West:** SBCM 01.053.033, 01.053.035, 01.053.038-01.053.041

Relative age: Rancholabrean

Taxa: Mammalia (small-size)



*Lepus* sp.  
*Antilocapra* sp. or *Stockoceros* sp.

**\*Cadiz, Fenner Valley:** SBCM 1.46.1-1.46.46, 1.52.1-1.52.195

Relative age: late Irvingtonian or early Rancholabrean

Taxa: *Bufo* sp.  
Testudinidae  
*Geochelone* sp.  
*Xantusia vigilis*  
*Cnemidophorus tigris*  
*Sceloporus* sp. (large)  
cf. *Uta stansburiana*  
cf. *Crotaphytus* sp.  
*Phrynosoma* sp.  
*Pituophis melanoleucus*  
*Coluber* sp. or *Masticophis* sp.  
Colubridae (small)  
Colubridae (medium)  
*Crotalus* sp.  
Aves (small)  
Aves (medium)  
cf. *Lepus* sp.  
cf. *Sylvilagus* sp.  
Leporidae (medium-sized)  
Sciuridae (small-sized)  
cf. *Eutamias* sp.  
*Spermophilus (Xerospermophilus)* sp. or *Spermophilus (Ictidomys)* sp.  
*Thomomys bottae*  
*Thomomys* sp. ? *T. bottae*  
*Perognathus* sp. (small-sized)  
*Perognathus* sp. (large-sized)  
*Dipodomys* sp. (small-sized)  
*Dipodomys* sp. (? medium-sized)  
*Dipodomys* sp. (large-sized)  
*Peromyscus* sp. (small-sized)  
*Peromyscus* sp. (large-sized)  
*Neotoma* sp. (small-sized)  
*Neotoma* sp. (large-sized)  
cf. *Canis* sp. (large-sized)  
Felidae (medium-sized)  
cf. *Camelops* sp.  
? *Capromeryx* sp.  
? *Tetrameryx* sp.

Source: Reynolds and Reynolds (1992)\*

**Calico Early Man Site, Calico Mountains:** SBCM 1.128.5

Geologic formation: Yermo Gravels

Relative age: Rancholabrean

Radiometric dates: U/Th series 200 ± 20 ka BP

Taxon: Proboscidea  
\*Mammalia small-sized

Sources: Bischoff *et al.* (1981), Budinger (1983), Jefferson (1989a), \*Patterson (1999)

**Calico Lakes Project, Daggett:** SBCM 1.76.35, 1.76.35a-1.76.37

Relative age: Rancholabrean, in part early Holocene

Radiometric dates:  $^{14}\text{C}$  12,800  $\pm$  900, 9,050  $\pm$  350 yr BP

Taxa: Osteichthyes  
*Rana* sp.  
*Xantusia* sp. cf. *X. vigilis*  
Colubridae  
Crotalinae  
Aves  
*Scapanus latimanus*  
*Sylvilagus* sp.  
*Lepus* sp. cf. *L. californicus*  
*Spermophilus mohavensis*  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp.  
*Peromyscus* sp.  
*Neotoma lepida*  
*Microtus* sp. cf. *M. californicus*  
*Equus* sp. cf. *E. occidentalis*  
*Camelops* sp. cf. *C. hesternus*  
*Hemiauchenia macrocephala*  
*Ovis canadensis*

Sources: Reynolds and Reynolds (1985), Jefferson (1989a), Connin *et al.* (1998)\*

**Calico Road, Calico Mountains, Calico Ghost Town\*:** SBCM 1.76.18-1.76.28

Relative age: Rancholabrean

Taxa: Testudines  
*Lepus* sp.  
*Equus* sp.  
*Camelops* sp.

Source: Jefferson (1989a), Scott (1997, 2000)\*

**Campbell Hill and Twentynine Palms Gravel Pit, Twentynine Palms:** LACM 4281-4283; SBCM 1.86.4, 1.86.9, 1.86.11-1.86.13

Relative age: early Rancholabrean, ? Illinoian, later mid-Pleistocene\*

Taxa: *Nothrotheriops* sp.  
*Gopherus* sp.  
*Thomomys* sp.  
*Taxidea taxus*  
*Smilodon* sp. cf. *S. fatalis*  
*Felis concolor*  
*Mammuthus* sp.  
*Equus* sp. (large-size)  
*Equus* sp. (small-size)  
*Camelops* sp.  
*Hemiauchenia* sp.  
*Odocoileus* sp. cf. *O. virginianus*  
*Capromeryx* sp.  
Antilocapridae\*  
Antilocapridae or Cervidae\*  
*Bison* sp. (large)\*  
*Ovis* sp. cf. *O. canadensis*

Source: Jefferson (1986b, 1989a, 1991b, 1992a\*), Scott (2002)\*

Note: The following taxa may have been incorrectly reported (Jefferson 1991b, 1992a\*) and have been removed from the 1991b list: *Megalonyx* sp., and *Bison* sp. cf. *B. antiquus*, *B. sp.* (large) from Scott (2002).

**Camp Cady Bluffs Numbers 1-3, Yermo:** SBCM 1.76.7-1.76.9

Relative age: Rancholabrean

Local Fauna: Camp Cady LF

Taxon: Mammalia

Source: Jefferson (1989a)

**Carbon Canyon, Waste Water, Chino\*:** SBCM 5.1.9-5.1.10

Relative age: Rancholabrean

Taxon: *Paramylodon* sp.

*Equus* sp.

*Camelops* sp.

Source: Reynolds and Reynolds (1991a)\*

**\*Champagne, Pomona Valley:** SBCM 5.1.8

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Reynolds and Reynolds (1991a)

**Chino:** LACM 1728

Relative age: Rancholabrean

Taxa: cf. *Equus* sp.

cf. *Camelops* sp.

**\*Chino Hills:**

Relative age: Rancholabrean

Taxa: Osteichthyes  
*Taricha torosa*

Anuria

Aves

*Mammuthus* sp.

Xenarthra

*Thomomys* sp.

*Dipodomys* sp.

Cricetidae (vole, deer mouse, pocket mouse, harvest mouse)

Procyonidae

Mustelidae

Canidae

Felidae

*Equus* sp.

Camelidae (camel)

Camelidae (llama)

*Capromeryx* sp.

*Antilocapra* sp.

*Bison* sp.

Source: Gust and Scott (2005)

**\*\*Harvest Development, Chino Hills:** LACM

Relative age: Rancholabrean

Taxa: *Nothrotheriops shastensis*

Proboscidea  
*Equus* sp. cf. *E. gigantea*

Source: Barnes (pers. comm. 2003)

**Cool Water Coal Gasification Site, Daggett:** SBCM 1.76.31-1.76.32

Relative age: Rancholabrean

Taxa: *Gopherus agassizi*  
*Sylvilagus* sp.  
*Lepus* sp. cf. *L. californicus*  
*Mammuthus* sp.  
*Equus* sp. cf. *E. occidentalis*

Sources: Reynolds and Reynolds (1985), Jefferson (1989a)

**Cool Water Coal Gasification Solid Waste Site, Daggett:** SBCM 1.76.33

Relative age: Rancholabrean, in part early Holocene

Radiometric date:  $^{14}\text{C}$  12,210  $\pm$  430 yr BP

Taxa: *Gasterosteus aculeatus*  
*Gila bicolor*  
*Scaphiopus* sp.  
Anura  
*Gambelia wislizenii*  
*Phrynosoma platyrhinos*  
*Phrynosoma* sp.  
*Sceloporus* sp.  
*Xantusia* sp. cf. *X. vigilis*  
*Cnemidophorus* sp.  
*Gerrhonotus* sp.  
Colubridae  
Crotalinae  
*Callipepla* sp.  
*Geococcyx californianus*  
Carpimulgidae  
*Colaptes* sp.  
*Eremophila alpestris*  
approx. Troglodytes  
cf. *Turdus* sp.  
cf. *Mimus* sp.  
Vireonidae  
*Dendroica* sp.  
Emberizinae (small)  
Emberizinae (large)  
aff. *Pheucticus* sp.  
aff. *Zonotrichia* sp.  
aff. *Junco* sp.  
*Icterus* sp. aff. *I. cucullatus*  
aff. *Icterus* sp.  
aff. *Sturnella* sp.  
Interinae aff. "blackbirds"  
*Xanthocephalus* sp. cf. *X. xanthocephalus*  
Fringillidae  
Carduelinae  
*Sorex ornatus*  
*Sorex* sp.

*Notiosorex crawfordi*  
*Scapanus latimanus*  
*Antrozous pallidus*  
*Sylvilagus audubonii*  
*S. bachmani*  
*Lepus* sp.  
*Spermophilus mohavensis*  
*Spermophilus* sp. (small-size)  
*Tamias* sp. cf. *T. minimus*  
*Thomomys* sp.  
*Dipodomys* sp.  
*Perognathus* sp.  
*Peromyscus* sp.  
*Neotoma lepida*  
*Microtus* sp.  
*Vulpes macrotis*  
Proboscidea  
*Equus* sp. (large-size)  
*Hemiauchenia macrocephala*

Sources: Reynolds and Reynolds (1985), Goodwin (1989b), Goodwin and Reynolds (1989b), Jefferson (1989a)

**Coyote Lake IPP Electrodes:** SBCM 1.75.11

Geologic formation: Manix Formation

Relative age: Rancholabrean, Wisconsinan

Taxa: *Gila bicolor*

*Gasterosteus aculeatus*

Sources: Roeder (1985), Jefferson (1989)

**Crestview Wash Spring, Sacramento Mountains:** SBCM 1.30.11; SM

Relative age: Rancholabrean

Taxon: Edentata

Source: Jefferson (1991b)

**Danby Lake:** SBCM 1.41.1

Relative age: Rancholabrean

Taxon: *Equus* sp. (large-size)

**Earp:** CITM

Relative age: Rancholabrean

Radiometric date: amino acid racemization  $\geq 250$  ka BP

Taxon: *Mammuthus* sp.

Source: R. E. Reynolds (pers. comm. 1986), Jefferson (1991b)

**El Evado Edison Road, Victorville:** SBCM 1.114.29

Geologic formation: Noble's Old Alluvium or Shoemaker Gravels

Relative age: latest Irvingtonian

Taxa: *Gopherus* sp.

Rodentia

*Equus* sp.

Camelidae

Sources: Bowen (1954), Noble (1954), Jefferson (1986B), Reynolds (1989A), Cox and Tinsley (1999)\*

Note: Age revised to late Irvingtonian from 1991 report.

**Eureka Street, Victorville:** SBCM 1.114.7

Geologic formation: Noble's Old Alluvium or Shoemaker Gravels Relative age: latest Irvingtonian

Taxon: *Mammuthus* sp.

Sources: Bowen (1954), Noble (1954), Jefferson (1986b), Reynolds (1989a), Cox and Tinsley (1999)\*

Note: Age revised to late Irvingtonian from 1991 report.

**Falling Arches Midden, Whipple Mountains:** UALP 7449

Relative age: Rancholabrean

Radiometric date:  $^{14}\text{C}$  11,650  $\pm$  190 yr BP

Taxa: *Sauromalus obesus*  
*Chionactis occipitalis*  
*Sylvilagus* sp.  
*Dipodomys* sp.  
*Perognathus* sp.  
*Neotoma* sp.

Sources: Lundelius *et al.* (1983), Mead *et al.* (1983), Jefferson (1991b)

**Fort Irwin, Artillery Range Number 10:** SBCM 1.153.2

Relative age: Irvingtonian or Rancholabrean

Taxa: *Nothrotheriops* sp.  
*Canis* sp. (large-size)  
*Panthera* sp. cf. *P. onca agusta*  
Felidae (large-size)  
*Equus* sp.  
Artiodactyla (large-size)

Source: Jefferson (1990a)

**Harper Valley:** LACM 1345

Relative age: ? Holocene

Taxon: *Lepus* sp.

Source: Jefferson (1989a)

**\*Haws:** SBCM 1.123.1-2

Relative age: Rancholabrean

Taxa: Cyprinidae  
Lacertilia  
Colubridae  
Chelonia  
*Lepus* sp.  
*Sylvilagus* sp.  
*Thomomys* sp.  
*Dipodomys* sp.  
*Dipodomys* sp. (small-size)  
*Peromyscus* sp.  
*Microtus* sp.

Sources: Reynolds and Reynolds (1994)

**Helendale Marl Quarry, Vitrlite Marl:** LACM 1184

Relative age: Rancholabrean

Taxa: *Phrynosoma* sp.  
*Zenaida macroura*  
*Sylvilagus* sp. (small-sized)

*Lepus* sp.  
*Perognathus* sp.  
*Dipodomys* sp.  
*Thomomys* sp.  
*Neotoma* sp.

Source: Jefferson (1989a)

**\*Hoffman Road:** SBCM 126.37-54

Relative age: Rancholabrean

Taxa: *Gila* sp.  
Teleostei (small-sized)  
Anura  
*Phrynosoma* sp. ? *P. platyrhinos*  
*Cnemidophorus* sp.  
*Crotalus* sp.  
Aves  
*Lepus* sp.  
*Sylvilagus* sp.  
*Spermophilus* sp. (small-sized)  
*Spermophilus* sp. ? *S. townsendi*  
cf. *Xerospermophilus* sp.  
*Ammospermophilus* sp.  
*Thomomys* sp.  
*Perognathus* sp.  
*Dipodomys* sp.  
*Peromyscus* sp.  
*Neotoma* sp.  
*Onychomys* sp.  
*Microtus* sp.

Sources: Reynolds and Reynolds (1994)

**Kingston Wash Lacustrine Sediments, Cima Road:** SBCM 1.6.5

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
*Equus* sp.  
Camelidae

**Kokoweef Cave, Kokoweef Peak, Ivanpah Mountains:** SBCM 1.11.13

Relative age: Rancholabrean, late Wisconsinan, ? in part early Holocene

Radiometric date:  $^{14}\text{C}$  9,850  $\pm$  160 yr BP

Taxa: *Gila* sp. \*  
Bufonidae  
*Gopherus agassizi*  
*Celonyx variegatus* \*  
*Phrynosoma platyrhinos*  
*Sauromalus* sp.  
*Crotaphytus collaris*  
*Gambelia wislizenii*  
*Sceloporus* sp. cf. *S. magister* \*  
*Sceloporus* sp. B  
*Eumeces* sp. cf. *E. gilberti*  
*Cnemidophorus tigris*  
*Coleonyx variegatus*

*Eumeces* sp. cf. *E. gilberti* \*  
*Rhinococheilus leonti* \*  
*Salvadora hexalepis* \*  
*Trimorphodon biscutatus* \*  
*Masticophis* sp. \*  
*Pituophis melanoleucus* \*  
*Crotalus* sp. A  
*Crotalus* sp. B  
*Gymnorhinus cyanocephalus*  
*Aechmophorus occidentalis*  
*Podiceps* sp. cf. *P. nigricollis*  
*Fulica americana*  
*Centrocerus* sp.  
*Meleagris* sp. cf. *M. crassidens*  
*Buteo* sp. cf. *B. jamaicensis*  
*Gymnogyps* sp. cf. *G. amplus*  
*Falco sparverius*  
*F. mexicanus*  
*Otus* sp. cf. *O. asio*  
 cf. *Oporornis* sp.  
*Notiosorex crawfordi*  
*Myotis subulatus leibii*  
*M. thysanodes*  
*Plecotus* sp. cf. *P. townsendii*  
*Antrozous pallidus*  
*Ochotona princeps*  
*Sylvilagus* sp. cf. *S. audubonii*  
*Lepus* sp. cf. *L. californicus*  
*Eutamias minimus*  
*Eutamias* sp. (small-size)  
*Eutamias* sp. (large-size)  
*Marmota flaviventris*  
*Spermophilus townsendii*  
*S. lateralis*  
*S. variegatus*  
*Spermophilus* sp. ? *S. mojavensis*  
*Ammospermophilus* sp. cf. *A. leucurus*  
*Thomomys bottae*  
*Thomomys* sp.\*  
*Dipodomys* sp.  
*Perognathus (Perognathus)* sp.  
*Perognathus (Chaetodippus)* sp.  
*Reithrodontomys megalotis*  
*Peromyscus (Peromyscus)* sp.  
*Peromyscus (Haplomyiomys)* sp.  
*Neotoma albigula*  
*N. stevensi*  
*N. cinerea*  
*N. lepida*  
*Neotoma* sp. *N. cinerea* or *N. mexicana*  
*Lemmiscus* sp. \*  
*Microtus californicus*  
*Lagurus curtatus*



*Canis latrans*  
*Vulpes macrotis*  
*Urocyon cinereoargenteus*  
*Bassariscus astutus*  
*Mustela frenata*  
*Taxidea taxus*  
*Spilogale putorius*  
*Lynx rufus*  
*Equus* sp.  
*Camelops* sp. cf. *C. hesternus*  
*Odocoileus* sp.  
*Antilocapra americana*  
*Ovis canadensis*

Sources: Lundelius *et al.* (1983), Kurten and Anderson (1980), Harris (1985), Norell (1986), Goodwin and Reynolds (1989a), Roth and Reynolds (1990), Force (1991), Jefferson (1991b), Reynolds *et al.* (1991)\*, Scott (1997)\*, Connin *et al.* (1998)\*, Bell and Jass (2004)\*

Note: The taxon *Equus conversidens* has been removed/replaced from the 1991 from the list.

**Kramer, SEGS Numbers III-VII:** SBCM 1.137.3-1137.9

Relative age: Rancholabrean

Taxa: *Gopherus* sp.  
? *Sylvilagus* sp.  
*Lepus* sp.  
*Equus* sp.  
*Hemiauchenia* sp.  
*Antilocapra* sp.

Source: Jefferson (1989a)

**Lake Manix, Yermo:** LACM(CIT) 540-542, 582 LACM 1093, 3496, 4032-4039, 4054-4061; SBCM 528, 1.59.2-1.59.23, 1.59.30; UCMP 676, 791; UCRV 6709-6764, 6767, 6769, 6852, 69100-69124, 7019-7024, 7049-7065, 7101-7115, 7129-7146; USGS (field locality numbers)

Geologic formation: Manix Formation

Relative age: latest Irvingtonian through Rancholabrean, <sup>18</sup>O stages 14 through 2, late Illinoian through Wisconsinan

Radiometric dates: numerous determinations, U/Th and <sup>14</sup>C, ≥350 to 14 ka BP

Local Fauna: Camp Cady LF

Taxa: *Gila bicolor mojavensis*  
*Gasterosteus aculeatus*  
*Clemmys marmorata*  
*Gopherus agassizi*  
*Gavia* sp. cf. *G. pacifica*  
*Podiceps* sp. cf. *P. nigricollis*  
*Aechmophorus occidentalis*  
*Pelecanus* sp. aff. *P. erythrorhynchos*  
*Phalacrocorax auritus*  
*P. macropus*  
*Ciconia maltha*  
*Phoenicopterus minutus*  
*P. copei*  
*Cygnus* sp. cf. *C. columbianus*  
*Branta canadensis*  
*Anas* sp. cf. *A. platyrhynchos*  
*A.* sp. cf. *A. crecca*

*Aythya* sp.  
*Mergus* sp. cf. *M. merganser*  
*Oxyura jamaicensis*  
*Haliaeetus leucocephalus*  
*Aquila chrysaetos*  
*Fulica americana* sp. cf. *F. a. shufeldti*  
*Grus* sp.  
 cf. *Actitis* sp.  
 Phalaropodinae  
*Larus* sp. cf. *L. oregonus*  
*Larus* sp.  
*Bubo virginianus*  
*Megalonyx* sp.  
*Nothrotheriops* sp. cf. *N. shastensis*  
*Paramylodon* sp.  
*Lepus* sp.  
 Cricetidae  
*Canis latrans*  
*Canis* cf. *C. dirus*  
*Arctodus* sp.  
 cf. *Ursus* sp.  
*Homotherium* sp. cf. *H. crenatidens*  
*Homotherium* sp. cf. *H. serum*  
*Felis* sp.  
*Mammuthus* sp.  
*Equus* sp. cf. *E. conversidens*  
*Equus* sp. (large-size)  
*Camelops* sp. cf. *C. hesternus*  
*Camelops* sp. aff. *C. minidokae*  
*Hemiauchenia macrocephala*  
 Antilocaprae  
*Bison* sp. cf. *B. antiquus*  
*Ovis canadensis*

Sources: Brattstrom (1961), Kurten and Anderson (1980), Harris (1985), Jefferson (1985a, 1985b, 1987, 1989a, 1991c\*, 1994\*, 1999\*), Meek (1989), Jefferson and Tejada-Flores (1993)\*, Scott (1997, 2002, 2004)\*

Note: *Fulica americana* cf. *F. a. shufeldti* was originally listed as *F. a. minor*. The taxon Lamini has been deleted from the 1991 list.

**Leon, Victorville:** SBCM 1.114.3

Geologic formation: Noble's Old Alluvium or Shoemaker Gravels

Relative age: latest Irvingtonian

Taxon: *Equus* sp.

Sources: Bowen (1954), Noble (1954), Jefferson (1986b), Reynolds (1989a), Cox and Tinsley (1999)\*

Note: Age revised to late Irvingtonian from 1991 report.

**Los Serranos Creek, Aspen Lane, Chino:** SBCM 1.116.1

Relative age: Rancholabrean

Taxa: *Equus* sp.

*Odocoileus* sp.

*Bison* sp. cf. *B. antiquus*

Source: Reynolds and Reynolds (1991a)\*

**Ludlow Cave, Ludlow** (Two Raven Cave): SBCM CaSBR-1887; Reeves private collection, Ludlow, California

Relative age: Rancholabrean

Taxa: *Gopherus agassizi*  
*Nothrotheriops shastensis*  
*Canis latrans*  
cf. *Capromeryx* sp.  
*Hemiauchenia macrocephala*

Sources: P. Reeves (pers. comm. 1988), Jefferson (1989a), R. H. Osborne (pers. comm. 1990), McDonald (2003)\*

**Luz Foundation, Daggett:** SBCM 1.76.34

Relative age: Rancholabrean

Taxa: Osteichthyes  
Anura  
*Sceloporus* sp.  
*Xantusia* sp. cf. *X. vigilis*  
Colubridae  
Crotalinae  
Aves  
*Notiosorex crawfordi*  
*Sylvilagus* sp.  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp.  
*Peromyscus* sp.  
*Neotoma lepida*  
*Microtus* sp. cf. *M. californicus*

Sources: Reynolds and Reynolds (1985), Jefferson (1989a)

**Luz Solar Trough Site, Daggett:** SBCM 1.76.34

Relative age: Rancholabrean

Radiometric date:  $^{14}\text{C}$  10,910  $\pm$  425 yr BP

Taxa: Osteichthyes  
*Dipsosaurus dorsalis*  
*Sauromalus obesus*  
*Phrynosoma platyrhinos*  
*Sceloporus* sp.  
*Cnemidophorus* sp.  
*Lichanura trivirgata*  
Colubridae  
Crotalinae  
Fringillidae  
Trogloditidae  
*Sylvilagus* sp.  
*Lepus* sp. cf. *L. californicus*  
*Ammospermophilus leucurus*  
*Spermophilus mohavensis*  
*S. tereticaudus*  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp.  
*Peromyscus* sp.

*Neotoma lepida*  
*Microtus* sp. cf. *M. californicus*  
*Vulpes* sp. cf. *V. macrotis*  
*Equus* sp. cf. *E. occidentalis*

Sources: Reynolds and Reynolds (1985), Goodwin and Reynolds 1989b), Jefferson (1989a)

**Mescal Cave, Mescal Range:** SBCM 1.10.12, UCMP V38064

Relative age: Rancholabrean

Taxa: *Gopherus agassizi*  
*Sceloporus occidentalis*  
*Cnemidophorus* sp. cf. *C. tigris*  
*Crotaphytus* sp.  
*Crotalus viridis*  
*Ochotona princeps*  
*Marmota* sp. cf. *M. flaviventris*  
*Spermophilus lateralis*  
*Perognathus* sp.  
*Microtus* sp.  
*Neotoma* sp. ? *N. cinerea*  
*Bassariscus astutus*  
*Spilogale* sp.  
*Equus* sp.

Sources: Brattstrom (1958), Lundelius *et al.* (1983), Harris (1985), Jefferson (1991b)

**Minneola Road, Yermo:** SBCM 1.76.30

Relative age: uncertain

Taxon: Mammalia

Source: Jefferson (1989a)

**Mitchell Cavern, Providence Mountains (Mitchell's Caverns):** LACM 3497; MAUCB; SBCM 1.18.9;  
UCRV

Relative age: Rancholabrean, ? in part early Holocene

Taxa: *Gopherus* sp. cf. *G. agassizi*  
*Fulica* sp.  
*Bubo virginianus*  
*Geococcyx californianus*  
*Corvus corax*  
*Nothrotheriops shastensis*  
*Sylvilagus* sp. cf. *S. audubonii*  
*Lepus californicus*  
*Lepus* sp.  
*Marmota* sp. ? *M. flaviventris*  
Sciuridae  
*Spermophilus* sp.  
*Dipodomys* sp. aff. *D. merriami*  
*Peromyscus* sp.  
*Neotoma* sp. cf. *N. lepida*  
? *Urocyon* sp.  
*Bassariscus astutus*  
*Felis* sp. (small-size)  
*Lynx rufus*  
*Equus* sp. (large-size)  
*Camelops* sp.

*Ovis* sp. cf. *O. canadensis*

Source: Jefferson (1991b), McDonald (1996, 2003\*)

**Mojave River Bluffs, Yermo:** SDSNH

Geologic formation: Manix Formation

Relative age: Rancholabrean

Local Fauna: Camp Cady LF

Taxon: *Gila* sp.

*Equus* sp. (small-size)

Source: Jefferson (1989a)

Note: SDSNH locality number not assigned.

**Morongo Grade, Morongo Valley:** SBCM 1.95.1

Relative age: uncertain

Taxon: *Equus* sp.

Source: Jefferson (1991b)

**Newberry Condor Road, Newberry:** SBCM 1.76.15

Relative age: uncertain

Taxon: Mammalia

Source: Jefferson (1989a)

**Newberry Cave, Newberry Mountains:** SBCM 102

Relative age: Rancholabrean, in part early Holocene

Radiometric date:  $^{14}\text{C}$  11,600  $\pm$  500 yr BP

Taxa: *Sauromalus obesus*

*Crotalus* sp.

*Gopherus agassizi*

*Gymnogyps californicus*

*Buteo jamaicensis*

*Fulica americana*

*Bubo virginianus*

*Nothrotheriops shastensis*

*Sylvilagus audubonii*

*Lepus californicus*

*Marmota flaviventris*

*Spermophilus* spp.

*Ammospermophilus leucurus*

*Thomomys bottae*

*Dipodomys* sp.

*Neotoma lepida*

*Microtus californicus*

*Canis latrans*

*Urocyon cinereoargenteus*

*Taxidea taxus*

*Felis concolor*

*Equus caballus*

*Ovis canadensis nelsoni*

Sources: Davis and Smith (1981), Jefferson (1989a), Goodwin (1989), McDonald (2003)\*

**Old Spring, Needles:** UCMP V36025

Relative age: Rancholabrean

Taxa: *Equus* sp.

*Camelops* sp.

Source: TAXIR, Jefferson (1991b)

**\*Piute Ponds, Lake Thompson:** SBCM 1.155.144-1.155.453

Relative age: Rancholabrean

Taxa: *Gasterosteus* sp.  
? *Bufo* sp.  
*Phrynosoma* sp. cf. *P. platyrhyninos*  
*Crotaphytus collaris*  
*Uta stansburiana*  
*Sceloporus* sp.  
*Cnemidophorus* sp. cf. *C. tigris*  
*Cnemidophorus* sp.  
*Crotalus* sp.  
*Lepus* sp.  
*Sylvilagus* sp.  
*Sciuridae*  
*Thomomys bottae*  
*Dipodomys* sp. (small-sized)  
*Dipodomys* sp. (large-sized)  
*Microtus* sp.  
*Peromyscus* sp. (small-sized)  
*Peromyscus* sp. (large-sized)  
*Taxidea* sp.  
*Canis latrans*  
*Equus* sp. (large-sized)

Source: Reynolds and Reynolds (1991b)

**Piute Valley Lacustrine Sediments Numbers 1-6, Searchlight, Nevada:** SBCM 1.28.1-1.28.6

Relative age: Rancholabrean

Taxa: Aves  
*Sylvilagus* sp.  
*Lepus* sp. (large-size)  
*Lepus* sp. (small-size)  
*Spermophilus townsendii*  
*Thomomys* sp.  
*Dipodomys* sp.  
*Neotoma* sp.  
*Microtus* sp. cf. *M. californicus*  
*Panthera atrox*  
*Equus* sp.  
*Camelops* sp.  
Bovidae (large)\*

Sources: Jefferson (1971, 1991b, 1992), Goodwin and Reynolds (1989b), Quade *et al.* (1995)\*, Quade *et al.* (1998)\*, Scott (1997, 2000, 2002)\*

Note: The taxon *Equus* sp. cf. *E. conversidens* has been removed/revised from the 1991 list, *Bison* has been removed.

**Rabbit Springs, Lucerne Dry Lake:** SBCM 1.107.1

Relative age: Rancholabrean

Taxa: *Equus* sp.  
? Camelidae

Source: Jefferson (1989a)

**\*Red Hill:** SBCM 1.126.52  
Relative age: Rancholabrean  
Radiometric dates: > 30,000, 25,000 ± 310, 24,440 ± 2190 yr BP  
Taxa: *Gila* sp.  
Sources: Reynolds and Reynolds (1994), Meek (1999)

**Red Tail Peak Midden, Whipple Mountains** (Redtail Peak Midden): UALP 75114, 75116, 76148  
Relative age: Rancholabrean  
Radiometric dates: <sup>14</sup>C 13,810 ± 270, 11,520 ± 160, 10,030 ± 160 yr BP  
Taxa: *Bufo punctatus*  
*Hypsiglena torquata*  
*Lampropeltis getulus*  
*Lepus* sp.  
*Dipodomys* sp.  
*Peromyscus* sp.  
*Neotoma* sp.  
Sources: Lundelius *et al.* (1983), Mead *et al.* (1983), Jefferson (1991b)

**Saltmarsh, Danby Lake, Amboy:** SBCM 1.41.2a, 1.41.3-1.41.8  
Relative age: Rancholabrean  
Taxa: *Lepus californicus*  
*Lepus* sp.  
*Dipodomys* sp. cf. *D. deserti*  
*Dipodomys* sp. cf. *D. merriami*  
*Dipodomys* sp.\*  
*Vulpes* sp.  
*Equus* sp.  
*Equus* sp. (small-size)  
*Camelops* sp.  
*Artiodactyla* (small-size)  
Source: Jefferson (1991b), Reynolds and Reynolds (1992)\*

**Salt Springs, Death Valley:** SBCM 1.67.1, 1.67.3  
Relative age: Rancholabrean  
Geologic formation: Lake Dumont beds\*  
Radiometric date: ~ 30 kyr\*  
Taxa: *Clemmys* sp.  
*Phalacrocorax auritus*  
*Anas platyrhynchos*  
*Aythya valisineria*  
*Fulica* sp. cf. *F. americana*  
*Mammuthus* sp.  
Camelidae  
Source: Jefferson (1990a), Hooke (pers. comm. 2005)\*

**Sands Lacustrine Sediments, Devils Playground, Baker:** SBCM 1.62.1-1.62.2; UCRV 7001-7004, 7009-7010  
Relative age: Rancholabrean  
Age estimate: 180 to 120 kyr\*  
Taxa: *Mammuthus* sp.  
*Equus* sp. (large-size)

*Equus* sp. (small-size)

*Camelops* sp.

Source: Jefferson (1971, 1990a), Hooke (pers. comm. 2005)\*

**Schulling Cave, Newberry Mountains:** LACM 1123; SBCM 1.77.1

Relative age: Rancholabrean, Wisconsinan, in part early Holocene Radiometric date:  $^{14}\text{C}$  12,500  $\pm$  150 yr BP

Taxa: *Gopherus agassizi*  
*Sauromalus obesus*  
*Crotalus* sp. cf. *C. atrox*  
*Anas* sp. cf. *A. platyrhynchos*  
*A.* sp. cf. *A. crecca*  
*A. americana*  
*Aythya* sp. cf. *A. americana*  
*Oxyura jamaicensis*  
*Gymnogyps amplus*  
*Aquila chrysaetos*  
*Buteo jamaicensis*  
*Fulica americana*  
*Recurvirostra americana*  
*Zenaidura macroura*  
*Otus* sp. cf. *O. asio*  
*Bubo virginianus*  
*Colaptes auratus*  
*Corvus corax*  
*Homo sapiens*  
*Sylvilagus* sp.  
*Lepus* sp.  
*Spermophilus* sp.  
*Thomomys* sp.  
*Dipodomys* sp.  
*Perognathus* sp.  
*Neotoma* sp.  
*Canis* sp. cf. *C. lupus*  
*Urocyon* sp.  
*Procyon* sp.  
*Taxidea* sp. cf. *T. taxus*  
*Felis* sp. cf. *F. concolor*  
*Lynx* sp.  
*Equus* sp. (large-size)  
*Equus* sp. (small-size)  
Camelidae ? *Camelops hesternus*  
*Hemiauchenia* sp.  
*Capromeryx minor*  
*Ovis* sp.

Sources: Brattstrom (1958, 1961) Downs *et al.* (1959), Kurten and Anderson (1980), Jefferson (1983b, 1989a), Harris (1985), Jefferson *et al.* (1987)

**Silver Lake, Baker:** SBCM 1.65.1-1.65.5

Relative age: Rancholabrean

Taxa: *Gila bicolor*  
*Sylvilagus* sp.  
*Lepus* sp.



*Dipodomys* sp.

Source: Jefferson (1990a)

**Silver Shadow Cavern:** USGS 1192

Relative age: ? Holocene

Taxon: *Lepus californicus*

Source: Jefferson (1991b)

**Solar One Generation Station, Daggett:** SBCM 1.76.11-1.76.13

Relative age: Rancholabrean, in part early Holocene

Taxa: Anura  
*Gopherus agassizi*  
*Dipsosaurus dorsalis*  
*Sauromalus obesus*  
*Crotophytus* sp.  
*Phrynosoma platyrhinos*  
*Uta stansburiana*  
*Cnemidophorus* sp.  
*Gerrhonotus* sp.  
Colubridae  
Crotalinae  
Strigidae  
Tyrannidae  
Icteridae  
Fringillidae  
*Homo sapiens*  
*Sylvilagus* sp.  
*Lepus* sp. cf. *L. californicus*  
*Spermophilus tereticaudus*  
*Ammospermophilus* sp. cf. *A. leucurus*  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp.  
*Neotoma lepida*  
*Mammuthus* sp.  
*Equus* sp. cf. *E. occidentalis*  
*Camelops* sp. cf. *C. hesternus*

Sources: Reynolds and Reynolds (1985), Jefferson (1989a), Connin *et al.* (1998)\*

**Stevens Lake, Yermo:** SBCM 830

Geologic formation: Manix Formation

Relative age: Rancholabrean

Local Fauna: Camp Cady LF

Taxa: *Clemmys marmorata*  
Edentata  
*Mammuthus* sp.  
*Equus conversidens*  
*Camelops* sp. (large-size)

Source: Jefferson (1989a)

**Superior Dry Lake, Barstow:** SBCM 1.134.1; UCRV

Relative age: Rancholabrean, ? in part Holocene

Taxa: Leporidae

Camelidae

Source: Jefferson (1971, 1989a)

**Surprise Springs, Dead Man Lake, Twentynine Palms:** LACM 3350

Relative age: early Rancholabrean, later mid-Pleistocene\*

Taxa: *Equus* sp.  
*Camelops* sp.  
*Hemiauchenia* sp.  
*Bison* sp.

Source: Jefferson (1986b, 1991b, 1992a\*)

**Thorn, Victorville:** SBCM 1.114.6-1.114.24

Geologic formation: Noble's Old Alluvium or Shoemaker Gravels

Relative age: latest Irvingtonian

Taxa: *Mammuthus* sp.  
*Dipodomys* sp.  
*Equus* sp.  
*Camelops* sp.  
*Hemiauchenia* sp.

Sources: Noble (1954), Jefferson (1986b), Reynolds (1989a), Cox and Tinsley (1999)\*

Note: Age revised to late Irvingtonian from 1991 report.

**Tonner Canyon, Chino Hills:** SBCM 1.116.2

Relative age: Rancholabrean

Taxon: *Bison* sp. cf. *B. antiquus*

**Tunnel Ridge Midden, Whipple Mountains:** UALP 7343, 7525

Relative age: Rancholabrean

Radiometric dates:  $^{14}\text{C}$  12,670  $\pm$  260, 10,330  $\pm$  300 yr BP

Taxa: *Bufo punctatus*  
*Cnemidophorus tigris*  
*Cnemidophorus* sp.  
*Chionactis occipitalis*  
*Rhinocheilus lecontei*  
*Crotalus atrox*  
*Sylvilagus* sp.  
*Dipodomys* sp.  
*Perognathus* sp. or *Neotoma* sp.

Sources: Lundelius *et al.* (1983), Mead *et al.* (1983), Jefferson (1991b)

**Turner Springs, Victorville:** SBCM 1.114.25-1.114.26

Geologic formation: Noble's Old Alluvium or Shoemaker Gravels

Relative age: latest Irvingtonian

Taxon: *Lepus* sp.

Sources: Noble (1954), Jefferson (1986b), Reynolds (1989a), Cox and Tinsley (1999)\*

Note: Age revised to late Irvingtonian from 1991 report.

**United Energy Solar Ponds, Daggett:** SBCM 1.76.38

Relative age: Rancholabrean

Taxon: *Equus* sp. cf. *E. conversidens*

Sources: Reynolds and Reynolds (1985), Jefferson (1989a)

**Valley Wells Lacustrine Sediments, Valley Wells:** SBCM 1.1.1a-1.1.1c, 1.1.10-1.1.14

Relative age: Irvingtonian through Rancholabrean

Taxa: *Lepus* sp.  
*Canis* sp. cf. *C. latrans*  
? Felidae (large-size)  
*Mammuthus* sp. ? *M. columbi*  
*Equus* sp. (not *E. conversidens*)\*  
*Camelops* sp.  
*Hemiauchenia* sp.  
Antilocapridae

Source: Reynolds and Jefferson (1971, 1988, 1991), Jefferson (1991a), Reynolds *et al.* (1991)\*, Scott (1997)\*, Connin *et al.* (1998)\*, Quade *et al.* (1995)\*, Quade *et al.* (1998)\*

Note: Irvingtonian taxa included.

**Village Drive, Victorville:** SBCM 1.114.27-1.114.28

Geologic formation: Noble's Old Alluvium or Shoemaker Gravels

Relative age: latest Irvingtonian

Taxa: *Mammuthus* sp.  
*Equus* sp.  
Camelidae

Sources: Bowen (1954), Noble (1954), Jefferson (1986b), Reynolds (1989a), Cox and Tinsley (1999)\*

Note: Age revised to late Irvingtonian from 1991 report.

**Whipple Mountains Midden:** UALP 7447, 75123

Relative age: Rancholabrean, in part early Holocene

Radiometric dates: <sup>14</sup>C 10,430 ± 170, 9,980 ± 180 yr BP

Taxa: *Hypsiglena torquata*  
*Perognathus* sp.  
*Peromyscus* sp.

Sources: Lundelius *et al.* (1983), Mead *et al.* (1983), Jefferson (1991b)

## SAN DIEGO COUNTY

**Allegro Tower, San Diego:** LACMIP 17277-17278

Relative age: Rancholabrean

Age estimate: oxygen isotope 5a

Taxa: *Chondrichthyes* (small)  
*Myliobatis californica*

Source: Kennedy and Browne (2007)

**Ballast Point, San Diego:** SDSNH 3195

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Coronado Beach, San Diego:** AMNH

Relative age: Rancholabrean

Taxon: *Equus occidentalis*

Source: Hay (1927)

**\*Carlsbad, Robertson Ranch:** SDNHM

Relative age: early Rancholabrean

Age estimate: 120 to 220 kyr

Taxon: *Nothrotheriops shastensis*  
*Mammut americanum*

Source: Burge (2007, 2008)

**El Cajon, Cypress Street:** SDSNH

Relative age: Rancholabrean

Taxa: Proboscidea

**\*Fairbanks Ranch:** SDNHM

Relative age: ? Rancholabrean

Age estimate: 400 to 200 ka BP

Taxa: *Nothrotheriops shastensis*  
*Camelops hesternus*

Source: Deméré (pers. comm. 1999)

**\*Fairbanks Ranch South:** SDNHM

Relative age: ? Rancholabrean

Age estimate: 400 to 200 ka BP

Taxa: *Mammot americanum*  
*Mammuthus* sp.

Source: Deméré (pers. comm. 1999)

**Glen Abbey, Bonita:** SDSNH 3131

Relative age: Rancholabrean

Local fauna: Glen Abby LF\*

Taxa: Anura\*  
Testudinidae  
*Phrynosoma* sp.  
*Eumeces* sp.  
cf. *Elgaria* sp.  
Anguinae  
Lacertilia  
Colubridae  
Podicipedidae  
*Melanitta* sp.  
Accipitridae  
*Callipepla californica*  
*Callipepla* sp.  
*Ectopistes migratorius*  
Strigiformes  
*Scapanus latimanus*  
*Scapanus* sp.  
*Sorex* sp. cf. *S. ornatus*  
*Notiosorex crawfordi*  
*Notiosorex* sp.  
cf. *Lasiurus* sp.  
cf. *Tadarida* sp.  
*Sylvilagus* sp.  
*Lepus californicus*  
*Spermophilus* sp.  
*Thomomys* sp. cf. *T. bottae*  
*Perognathus maniculatus*  
*Perognathus* sp.  
*Peromyscus* sp.  
*Reithrodontomys megalotis*  
*Neotoma* sp.

*Microtus californicus*

*Microtus* sp.

*Equus* sp.

Source: Majors (1985, 1993\*), Chandler (1982)\*

Note: The taxon Heteromyidae has been deleted from the 1991 list.

**Goldfish Point, La Jolla:** LACM 6469

Geologic formation: Nestor Terrace

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Imperial Beach, Palm City:** SDSNH

Geologic formation: Nestor Terrace

Relative age: Rancholabrean

Taxon: *Equus* sp. (large-size)

**La Jolla:** UCMP V65282

Relative age: Rancholabrean

Taxon: ? *Arctocephalus* sp.

Sources: Hay (1927), Carter (1957), Barnes and Mitchell (1975)

**La Jolla Shores:** LACM 1410

Relative age: Rancholabrean

Taxon: *Bison* sp.

**Midway Drive-In, Point Loma, San Diego:** SDSNH

Relative age: Rancholabrean

Taxon: *Equus* sp. (large-size)

**Morena Boulevard, Mission Bay, San Diego:** LACM 3817

Geologic formation: Nestor Terrace

Relative age: Rancholabrean

Taxa: Leporidae

*Thomomys* sp.

*Perognathus* sp.

*Peromyscus* sp.

*Neotoma* sp.

**National City:** LACM(CIT) 594

Geologic formation: Nestor Terrace

Taxon: *Tapirus* sp. cf. *T. californicus*

Sources: Stock (1944), Jefferson (1989b)

**Pala:** LACM(CIT) 599

Relative age: ? Rancholabrean

Taxon: *Equus* sp.

**Pendleton, U. S. Marine Corps Base (Camp Pendleton):** SDSNH

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

**Point Loma, San Diego:** LACM(CIT) 575

Relative age: Rancholabrean

Taxon: Camelidae  
Source: Carter (1957)

**Poway Valley:** LACM 1256  
Relative age: Rancholabrean  
Taxon: Cetacea

**\*Railroad Cut Locality, Mission Bay:** SDNHM

Relative age: late Pleistocene  
Age estimate: 300 ka (aminoacid)  
Taxa: *Myliobatis californicus*  
*Quietula guaymasiae*  
*Q. y-caudata*  
*Lepidogobius lepidus*  
*Ilypnus gilberti*  
*Bairdiella icistia*  
*Rhizoprionodon longurio*  
Source: Roeder (2004)

**Scripps Institute, La Jolla** (Scripps Institution of Oceanogeography): UCMP V52023

Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: Carter (1957)

**Solana Beach:** UCMP V63073

Relative age: Rancholabrean  
Taxa: *Mammut americanum*  
*Mammuthus* sp.  
Source: TAXIR

**\*St. Vincent de Paul:** SDSNH

Relative age: Rancholabrean or ? Irvingtonian  
Age estimate: < 500 kyr  
Taxon: *Mammuthus columbi*  
Note: 16<sup>th</sup> and Market Streets  
Source: Bell (2007)

**Tijuana River Valley:** SDSNH

Relative age: Rancholabrean  
Taxa: *Mammut* sp.  
*Mammuthus* sp.

**Torrey Pines Beach State Park:** SDSNH

Relative age: Rancholabrean or ? Holocene  
Taxon: *Equus* sp.

**delete**

**Vallecito Creek, Anza Borrego Desert:** LACM 4937

Geologic formation: Hueso\* Formation  
Relative age: Irvingtonian\*  
Taxon: *Mammuthus meridionalis*\*  
Note: stratigraphy reassessed, originally placed in Mesa Fm.

**\*Wanis View Estates: SDSNH**

Relative age: late Pleistocene, Rancholabrean

Taxa: *Eucyclogobius* sp.  
*Cottus* sp.  
*Mugil* sp.  
*Gasterosteus* sp.  
*Gila* sp. or *Rhinichthys* sp.  
*Bufo* sp.  
*Hyla* sp.  
*Clemmys* sp.  
*Sylvilagus* sp.  
*Spermophilus* sp.  
*Thomomys* sp.  
*Perognathus* sp.  
*Reithrodontomys fluvescens*  
*Neotoma mexicana*  
*Microtus* sp.  
cf. *Urocyon* sp.  
*Mammut americanum*  
*Mammuthus columbi*  
*Equus* sp.  
*Tapirus californicus*  
*Bison* sp.

Source: Wagner and Randall (2003), Randall et al. (2004)

**\*Warner Hot Springs: LACM**

Relative age: ? Rancholabrean

Taxon: *Equus* sp. (large-size)

**17th Street between Broadway and C Streets, San Diego: SDSNH 0685**

Relative age: Rancholabrean or ? Holocene

Taxon: cf. *Bison* sp.

SAN FRANCISCO COUNTY

**Bay Bridge Pier E-3, San Francisco:**

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: Savage (1951), Rodda and Baghai (1993)\*

**Bay Bridge Numbers 1-2, Pier 5, San Francisco: UCMP V34011, V69186**

Relative age: Rancholabrean

Taxa: *Mammuthus columbi*  
*Equus* sp.

Source: TAXIR, Savage (1951), Rodda and Baghai (1993)\*

**Bay Shore Southern Pacific Tunnel number 4 north, Bay Park or Roman: UCMP 1076**

Relative age: Rancholabrean

Taxon: *Mammut* sp. cf. *M. americanum*

Sources: TAXIR, Hay (1927), Savage (1951), Rodda and Baghai (1993)\*

**Cliff House Beach: GGMM**

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*  
Source: Hay (1927), Rodda and Baghai (1993)\*

**Fleishhacker Beach, San Francisco:** UCMP V39001

Relative age: Rancholabrean  
Taxa: *Mammut* sp. cf. *M. americanum*  
*Mammuthus* sp.  
*Equus* sp.  
*Bison* sp.

Source: TAXIR, Savage (1951), Rodda and Baghai (1993)\*

**Golden Gate, San Francisco:** CAS; USNM

Relative age: Rancholabrean  
Taxa: *Odobenus rosmarus*  
*Hydrodamalis gigas*

**Islias, San Francisco:** UCMP V34010

Relative age: Rancholabrean  
Taxon: Cetacea  
Source: TAXIR

**Ocean Beach:**

Relative age: Rancholabrean  
Taxon: *Mammut* sp. cf. *M. americanum*  
Source: Savage (1951)

**Pacific Avenue, San Francisco (Pacific Street):** CASG 61985

Relative age: Rancholabrean  
Radiometric Date: 25,380 ± 1,100 yr BP  
Taxon: *Paramylodon* sp.  
*Mammuthus columbi*\*  
*Bison* sp. cf. *B. latifrons*\*  
Sources: Hay (1927), Stock (1925), Rodda and Baghai (1993)\*

**San Francisco:** ANSP

Relative age: Rancholabrean  
Taxa: *Odocoileus* sp.  
*Bison antiquus*  
Source: McDonald (1981)

**\*Thornton Beach, San Francisco:** UCMP V6422, V6425

Relative age: ? Rancholabrean  
Taxon: *Megalonyx* sp.  
*Mammuthus* sp. ? *M. columbi*  
Source: TAXIR, Rodda and Baghai (1993)

**Treasure Island, San Francisco Bay:**

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Savage (1951), Rodda and Baghai (1993)\*

**Twin Peaks Tunnel, San Francisco:** UCMP V65243

Relative age: Rancholabrean



Taxon: *Paramylodon harlani*  
Sources: TAXIR, Hay (1927), Stock (1925), Rodda and Baghai (1993)\*

SAN JOAQUIN COUNTY

**Comita Road, Valley Home:** UCMP V50039

Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Lincoln Village:** UCMP V48022

Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Livermore Lab, H-E Test Site, Tracy:** UCMP V74136

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Mormon Slough, Manteca:** UCMP V51007

Relative age: Rancholabrean  
Taxa: Carnivora  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp.

Source: TAXIR

**Reiche Numbers 1-2, Tracy:** UCMP V48004, V48067

Relative age: Rancholabrean  
Taxa: *Mammut* sp.  
Equidae

Source: TAXIR

**Romoser Bayshore, Manteca:** UCMP V70073

Relative age: Rancholabrean  
Taxa: *Enhydra* sp.  
*Equus* sp.  
? *Bison* sp.

Source: TAXIR

**Stockton:** SU

Relative age: Rancholabrean  
Taxa: *Mammuthus columbi*  
*Equus* sp.  
Camelidae

Source: Hay (1927)

**Tracy Gravel Pit, Tracy:** UCMP V66150

Relative age: Rancholabrean  
Taxon: *Megalonyx* sp. cf. *M. jeffersoni*  
Source: TAXIR

**Wagner's Aqueduct:** UCMP V70122

Taxon: Osteichthyes

SAN LUIS OBISPO COUNTY

**Arbogast Ranch, Salinas River:** LACM 5791 (= CPVP 6901)

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.  
*Equus* cf. *E. occidentalis*  
*Bison* sp. cf. *B. antiquus*

Source: Jefferson *et al.* (1992b)\*

**Carrisa Plains School, Carrizo Plains:** LACM 5659 (= CPVP 7803)

Relative age: Rancholabrean

Taxa: *Mammuth americanum*  
*Mammuthus* sp.  
*Camelops* sp.  
*Bison latifrons*

Source: Jefferson *et al.* (1992)\*

**Cayucos, South 5th Street:** LACM 1720

Relative age: Rancholabrean

Taxon: *Gopherus* sp.  
Sciuridae

Source: Jefferson (1991), Jefferson *et al.* (1992b)\*

**Chorro Creek, Morro Bay:** LACM 5903 (= CPVP 7001)

Relative age: ? Rancholabrean

Taxon: *Mammuth americanum*

Source: Jefferson *et al.* (1992b)\*

**Creston Mammoth Site, Creston:** LACM (= CPVP 7802)

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Jefferson *et al.* (1992b)\*

**Crowbar Canyon** (Montana del Oro State Park, Canada Los Osos): LACM 4523, 4984; LACMIP 5640; USGS 7280

Relative age: Rancholabrean

Taxon: Mammalia

Source: Jefferson *et al.* (1992b)\*

**Diablo Canyon, Diablo Creek, Point San Luis:**

Relative age: early Holocene

Radiometric date:  $^{14}\text{C}$  9,320  $\pm$  140 yr BP

Taxon: *Homo sapiens*

Sources: Greenwood (1972), Irwin (1975)

**Irish Canyon, Point San Luis:** LACM 5800-5801

Relative age: Rancholabrean

Radiometric dates: U/Th 61.5  $\pm$  2.0, 50.6  $\pm$  1.7 ka BP

Taxa: *Equus* sp. cf. *E. occidentalis*  
*Bison antiquus*

Source: Jefferson *et al.* (1992b)\*

**Mankin, Ranchita Cattle Company:** LACM 5790 (= CPVP 6903)  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Jefferson *et al.* (1992b)\*

**Nipomo:** LACM 4089  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Jefferson *et al.* (1992b)\*

**\*Pecho Creek, Point San Luis:** LACM 5831  
Relative age: Rancholabrean  
Radiometric date: U/Th 49.0 ± 0.8 ka BP  
Taxon: *Hydrodamalis* sp.  
Source: Jefferson *et al.* (1992b)\*

**\*Pecho Creek, Point San Luis:** LACM 5802  
Relative age: Rancholabrean  
Radiometric date: U/Th 82.8 ± 3.4 ka BP  
Taxa: *Paramylodon harlani*  
Delphinidae  
? *Equus* sp.  
*Camelops* sp. cf. *C. hesternus*  
Source: Jefferson *et al.* (1992b)\*

**\*Point San Luis:** LACM 5803  
Relative age: Rancholabrean  
Radiometric date: U/Th 63 ± 1.5 ka BP  
Taxon: Cetacea  
Source: Jefferson *et al.* (1992b)\*

**Salinas River Sand Site:** CPVP 7801  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Sources: Bare (1978), Jefferson *et al.* (1992b)\*

**San Miguel:** CPVP 6902  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Jefferson *et al.* (1992b)\*

**San Miguel Number 2:** UCMP V65046  
Relative age: Rancholabrean  
Taxon: Camelidae  
Source: TAXIR, Jefferson *et al.* (1992b)\*

#### SAN MATEO COUNTY

**Año Nuevo State Reserve:** ANSR  
Relative age: Rancholabrean  
Radiometric date: <sup>14</sup>C ≥27,900 ± 400 yr BP  
Taxa: *Mammuthus columbi*

*Equus* sp.  
*Camelops* sp.

Source: L. Motz (1983, pers. comm. 1990)

**Halfmoon Bay, Arroyo de Leon:** GGMM

Relative age: Rancholabrean

Taxa: *Mammut* sp.  
*Mammuthus* sp.

Source: Hay (1927)

**Laguna Alta, Pacifica:** UCBMVZ; USGS 1230

Relative age: ? Holocene

Taxa: *Equus* sp.  
*Cervus nannoides*

**Menlo Park Station:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Savage (1951)

**Middlefield Road, Redwood City:** UCMP V74164; USGS 1302

Relative age: Rancholabrean

Taxon: *Camelops hesternus*

Source: TAXIR

**Millbrae (Milbrae):** YPM

Relative age: Rancholabrean

Taxa: *Mammut americanum*  
*Mammuthus* sp. cf. *M. columbi*  
*Equus* sp.

Source: Hay (1927), Savage (1951)

**Montara Beach:** USGS 1483

Relative age: Rancholabrean

Taxa: *Smilodon* sp.  
*Mammuthus* sp.

**Mussel Rock Number 2:** UCMP V40018

Relative age: Rancholabrean

\*Geologic formation: Merced Formation

Taxa: *Uria aalge*  
*Paramylodon* sp.  
*Mammuthus* sp.  
*Equus* sp.  
*Camelops hesternus*  
*Bison* sp.

Sources: TAXIR, Savage (1951), Lundelius *et al.* (1983), Rodda and Baghai (1993)\*

**Mussel Rock, South San Francisco:** UCMP V35005

Relative age: Rancholabrean

Taxa: Proboscidea  
*Bison* sp.

Source: TAXIR, Savage (1951), Rodda and Baghai (1993)\*

**Pilarcitos Lake** (Pilarcitos Valley):

Relative age: Rancholabrean

Taxon: *Bison antiquus*

Source: Hay (1927)

**San Francisquito Creek, Menlo Park:** USGS 1206

Relative age: ? Holocene

Taxa: *Homo sapiens*

*Spermophilus beecheyi*

Geomyidae

**San Francisquito Creek Northwest, Menlo Park:** USGS

Relative age: Rancholabrean

Taxon: *Mammut* sp.

**San Mateo:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**Seven Mile Beach, South San Francisco:** UCMP V36006

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR, Savage (1951), Rodda and Baghai (1993)\*

**Skyline Drive, South San Francisco:** UCMP V62003

Relative age: Rancholabrean

Taxon: *Alces* sp.

Source: TAXIR

**South San Francisco:** UCMP V63019

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

SANTA BARBARA COUNTY

**Carpinteria:** LACM(CIT) 139, LACM 1017, 4249, LACMIP 5102; SBMNH 132-136; UCMP V32013

Note: See Higgen's Tar Beds.

**Conception Station, Point Conception:** UCMP 1078

Relative age: Rancholabrean

Taxa: *Paramylodon* sp.

*Camelops* sp.

Source: TAXIR

**Corralitos Canyon, Point Sal:** UCMP V71018 (?= LACM 4938)

Relative age: Rancholabrean

Taxa: Mysticeti

? Proboscidea

Camelidae

*Bison* sp.

Source: TAXIR

**Corralitos Canyon, Point Sal:** UCMP V65099

Relative age: Rancholabrean

Taxon: *Tapirus* sp. cf. *T. californicus*

Sources: TAXIR, Stirton and Weddle (1929), Jefferson (1989b)

**Cuyler Harbor, San Miguel Island:** LACM 3500, 4491

Relative age: Rancholabrean

Taxon: *Chendytes* sp.

**\*Daisy Cave:** SMI-261

Relative age: early Holocene

Radiometric dates: 10,700 ± 90 to 2,990 ± 90 yr BP

Taxa: Aves

Reptilia

*Desmodus stocki*

*Sorex ornatus*

*Peromyscus maniculatus*

*P. nesodytes*

Source: FAUNMAP (1992)\*

**Graveyard Canyon, Santa Barbara Island:** LACM 4251

Relative age: Rancholabrean

Taxon: *Mancalla* sp. cf. *M. californiensis*

**Gaviota Pass:**

Relative age: Rancholabrean

Taxon: *Mammot* sp.

Source: Hay (1927)

**Goleta:** SBMNH

Relative age: Rancholabrean

Taxon: *Mammot* sp.

Source: R. S. Gray (pers. comm. 1987)

**Higgen's Tar Beds, Carpinteria (Higgen's Tar Ranch):** LACM(CIT) 139, LACM 1017, 4249, LACMIP 5102; SBMNH 132-136; UCMP V32013

Geologic formation: Carpinteria Formation

Relative age: Rancholabrean, ? Wisconsinan

Taxa: *Clemmys marmorata*

*Gambelia wislizenii*

*Sceloporus occidentalis*

*Pelecanus occidentalis*

*Ciconia maltha*

*Teratornis merriami*

\**Chen caeulescens* (Chen?)

*Anas platyrhynchos*

\**A. strepera*

\**A. crecca*

*Coragyps* \*(*Catharista*) *occidentalis*

*Cathartes aura*

*Gymnogyps amplus* \*(*californianus*)

*\*Teratornis merriami*  
*Haliaeetus leucocephalus*  
*Circus cyaneus* \*(*hudsonius*)  
*Accipiter gentilis* \*(*Astur atricapillus*)  
*A. cooperii*  
*\*A. striatus (velox)*  
*Buteo jamaicensis* \*(*borealis*)  
*B. regalis*  
*B. lineatus*  
*\*Buteo sp. cf. B. lagopus*  
*Buettogallus* \*(*Germanoaeetus*) *fragilis*  
*\*Amplibuteo (Morphnus) woodwardi*  
*Aquila chrysaetos*  
*Wetmoregyps daggetti*  
*Spizaetus* \*(*Geranoaeetus*) *grinnelli*  
*\*Carcara (Polyborus) plancus*  
*Neogyps errans*  
*Neophrontops americanus*  
*Falco sparverius*  
*\*F. sp. cf. F. columbarius*  
*Meleagris* \*(*Parapavo*) *californicus*  
*Callipepla* \*(*Lophortyx*) *californica*  
*\*Patagioenas (Columba) fasciata*  
*Zenaida macroura*  
*\*Rallus limicola*  
*Tringa melanoleuca*  
*Geococcyx californianus*  
*Tyto alba* \*(*Aluco pratincola*)  
*\*Strix brea*  
*\*Asio otus*  
*Otus kennicotti* \*(*asio*)  
*Bubo virginianus*  
*Glaucidium gnoma*  
*\*Phalacroptilus nuttalli*  
*Melanerpes* \**formicivorus*  
*\*M. lewisi*  
*Picoides* \**villosus*  
*Colaptes auratus cafer*  
*\*Sphyrapicus sp.*  
*\*Dyrobates sp.*  
*Sayornis sp.*  
*Empidonax sp.*  
*\*Tyrannus verticalis*  
*\*indet flycatcher*  
*\*Lanius ludovicianus*  
*Cyanocitta stelleri*  
*Aphelocoma coerulescens californica*  
*Pica nuttalli*  
*Corvus corax*  
*C. \*brachyrhynchus (caurinus)*  
*\*Trachycineta sp. cf. T. bicolor*  
*\*Pterochelidon pyrrhionota*  
*\*Poecile sp. (Penthestes)*

*Sialia mexicana*  
*Sitta canadensis*  
*S. pygmaea*  
\**Regulus* sp.  
\**Catharus* sp. (*Hylocichla*)  
*Turdus migratorius*  
\**Ixoreus naevius*  
\**Chamaea fasciata*  
*Parus* sp.  
*Bombycilla cedrorum*  
\**Dendroica* sp.  
\**Piranga ludovivianus*  
*Pipilo erythrophthalmus*  
\**P. maculatus*  
\**P. crissalis* (*fuscus*)  
\**Pipilo* sp. cf. *P. angelensis*  
*Carduelis pinus*  
*Loxia curvirostra*  
*Passerella iliaca*  
\**Zonotricha* sp. cf. *Z. leucophrys*  
*Sturnella neglecta*  
\**Xanthocephalus santhocephalus*  
\**Loxia curvirostra*  
\**Carduelis* (*Spinus*) *pinus*  
*Sorex* sp. cf. *S. ornatus*  
*Sorex* sp. cf. *S. trowbridgii*  
*Sylvilagus audubonii*  
*S. bachmani*  
*Lepus* sp.  
*Sciurus* sp.  
*Tamias* sp.  
*Thomomys bottae*  
*Dipodomys* sp.  
*Perognathus* sp.  
*Peromyscus* sp.  
*Onychomys* sp.  
*Neotoma* sp.  
*Microtus californicus*  
*Canis latrans*  
*C. dirus*  
*Urocyon cinereoargenteus*  
*Mustela* sp.  
*Taxidea taxus*  
*Spilogale putorius*  
*Mephitis mephitis*  
*Smilodon* sp.  
*Panthera* sp. ? *P. atrox*  
*Lynx* sp.  
*Mammuthus columbi*  
*Equus* sp. cf. *E. occidentalis*  
*Camelops* sp. cf. *C. hesternus*  
*Odocoileus* sp.  
*Bison* sp.



Sources: Sources: Miller and DeMay (1942), Wilson (1933), Kurten and Anderson (1980), \*Guthrie (2009)

**Hope Ranch, Santa Barbara:**

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Hay (1927)

**Isla Vista:** LACM 5018

Relative age: Rancholabrean  
Taxon: Teleostei  
*Equus* sp.

**Jalama State Park, Vandenberg Air Force Base:** SBCC; T. Wills Private Collection, Culver City, California

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
*Equus* sp.  
Source: R. S. Gray (pers. comm. 1987), T. Wills (pers. comm. 1991)

**Los Alamos and West Los Alamos:** LACM 3517-3518; UCMP V65030

Relative age: Rancholabrean  
Taxa: *Paramylodon* sp.  
*Equus* sp.

**Point Sal:** LACM 4938; SBCC; SBMNH (?= UCMP V71018)

Relative age: Rancholabrean  
Taxa: *Paramylodon* sp. cf. *P. harlani*  
*Mammuth* sp.  
*Equus* sp.  
Source: R. S. Gray (pers. comm. 1987)

**\*Running Springs, San Miguel Island:**

Relative age: Rancholabrean, late Holocene  
Age estimate: > 9,900  
Taxon: *Mammuthus* sp.  
Sources: Erlandson (2000)

**San Miguel Island:** CCSD SMI-V-1 through SMI-V-12

Relative age: Rancholabrean  
Radiometric dates: numerous determinations  $^{14}\text{C}$  32,143  $\pm$  787 to 11,890  $\pm$  95 yr BP  
Taxa: *Gerrhonotus multicarinatus*  
*Crotalus viridis*  
*Gavia pacifica*  
*Podiceps nigricollis*  
*Aechmophorus occidentalis*  
*Diomedea albatrus*  
*Fulmarus glacialis*  
*Puffinus griseus*  
*P. opisthomelas*  
*Oceanodroma homochroa*  
*Pelicanus occidentalis*  
*Phalacrocorax penicillatus*  
*P. pelagicus*

*Ardea herodias*  
*Plegadis chihi*  
*Chen caerulescens*  
*Branta canadensis*  
*Melanitta perspicillata*  
*M. fusca*  
cf. *Mergus serrator*  
*Chendytes lawi*  
*Gymnogyps californianus*  
*Haliaeetus leucocephalus*  
*Buteo jamaicensis*  
*Polyborus plancus*  
*Falco sparverius*  
*Calidris mauri*  
*Larus delawarensis*  
*L. californicus*  
cf. *L. occidentalis*  
*Uria aalge*  
*Cepphus* sp. cf. *C. columba*  
*Synthliboramphus hypoleucus*  
*S. antiquus*  
*Ptychoramphus aleuticus*  
*Cerorhinca* n. sp. (type locality)  
*Tyto alba*  
*Asio* sp. cf. *A. priscus*  
*Corvus corax*  
*Zonotrichia leucophrys*  
*Melospiza melodia*  
Passeriformes  
*Microtus* n. sp.  
*Urocyon littoralis*  
*Enhydra lutris*  
*Mammuthus exilis*

Source: Guthrie (1980, in press)

**San Miguel Island:** LACM(CIT) 168A-B, 4169, 6737; UCMP V65187

Relative age: Rancholabrean

Taxa: Aves

*Mammuthus columbi*

*M. exilis*

Source: TAXIR, Hay (1927), R. S. Gray (pers. comm. 1988)

**San Miguel Island Northwest:** SBMNH

Relative age: Rancholabrean

Taxa: Rodentia

*Mammuthus exilis*

**Santa Barbara Coast:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**\*Santa Barbara Island:**

Relative age: Pleistocene

Age estimate: <5,000 yr BP (*Desmodus*)

Taxa: *Haliaeetus leucophalus*  
*Desmodus stocki*  
*Zalophus* sp.  
*Mammuthus* sp.

Sources: Lipps *et al.* (1968), Ray *et al.* (1988), Santucci *et al.* (2001)

**Santa Cruz Island West:** LACM 4248; SBMNH

Relative age: Rancholabrean

Taxa: *Mammuthus columbi*  
*M. exilis*

Source: Cushing *et al.* (1984)

**Santa Rosa Island, Arlington Canyon (Arlington Springs Site):** CAS; LACM(CIT) 106, LACM 1757, 1763-1764, 4252, 4317; SBMNH

Geologic formation: Santa Rosa Island Formation

Relative age: Rancholabrean

Radiometric dates:  $^{14}\text{C} \geq 37,000$ ,  $29,700 \pm 3000$ ,  $16,700 \pm 1500$ ,  $15,820 \pm 280$ ,  $10,960$  yr BP

Taxa: *Asio priscus* (type locality)  
*Peromyscus nesodytes* (type locality)  
*Mammuthus columbi*  
*M. exilis* (type locality)

Sources: Hay (1927), Wilson (1936), Howard (1964), Hester (1967), Orr (1968), Madden (1976), Berger (1982), Agenbroad (1984), Johnson *et al.* (1999), Agenbroad *et al.* (2002)

**Santa Rosa Island, Canada Tecolote:** SBMNH

Relative age: Rancholabrean

Taxon: *Enhydra lutris*

Source: Mitchell (1966)

**\*Santa Rosa Island, Carrington Point:**

Relative age: Rancholabrean

Radiometric date:  $12,840 \pm 140$   $^{14}\text{C}$  yr BP

Taxon: *Batrachoseps* sp.  
Aves  
*Microtus* sp.  
*Mammuthus exilis*

Source: Agenbroad (1998a, 1998b), Mead *et al.* (2004)

**Santa Rosa Island, Garanon Canyon:** UCMP V50009

Geologic formation: Santa Rosa Island Formation

Relative age: Rancholabrean

Radiometric dates: numerous determinations  $^{14}\text{C}$  30,000 to 9,000 yr BP

Taxon: *Mammuthus exilis*

Sources: TAXIR, Orr (1967, 1968), Madden (1976), Agenbroad (1984), Erlandson and Morris (1994)\*

**\*Santa Rosa Island, Rockwell-Colson Site:**

Relative age: Rancholabrean

Taxon: *Mammuthus exilis*

Source: Agenbroad (1996)

**\*Santa Rosa Island:** CA-SRI-1

Relative age: early Holocene

Radiometric date: 8,730 ± 110 yr BP  
Taxa: Pisces  
Reptilia or Amphibia  
Mammalia  
Source: Erlandson and Rick (1999)

**\*Santa Rosa Island:**

Relative age: Rancholabrean  
Radiometric dates: 11,010, 11030 yr BP  
Taxon: *Mammuthus exilis*  
Source: Agenbroad et al. (2002)

SANTA CLARA COUNTY

**Alma Street Underpass at Page Mill Road: USGS 1203**

Relative age: Rancholabrean  
Taxa: *Mammuthus* sp.  
*Equus* sp.  
*Camelops* sp.  
Source: C. A. Repenning (pers. comm. 1989)

**Guadalupe River, San Jose: UCMP**

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp. cf. *M. columbi*  
Source: Gaura (2005)

**Long Point, Palo Alto: UCMP V79134**

Note: Specimen/s not listed in UCMP TAXIR database.

**Milpitas: UCMP V49016**

Relative age: Rancholabrean  
Taxon: *Bison* sp.  
Source: TAXIR

**Mountain View:**

Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Hay (1927)

**Mountain View Dump, Mountain View: USGS 1227**

Relative age: Rancholabrean, Wisconsinan  
Taxa: Mollusca  
Pisces  
Reptilia  
*Paramylodon harlani*\*  
*Spermophilus beldingi*\*  
*Dipodomys heermanni*\*  
*Neotoma fuscipes*  
*Mammuthus columbi*  
*Equus* sp.  
*Camelops hesternus*\*  
*Odocoileus* sp.  
*Bison* sp. cf. *B. latifrons*

Source: C. A. Repenning (pers. comm. 1989), FAUNMAP (1992)\*

**Rose Trombley's Back Yard** (? San Jose):

Relative age: Rancholabrean

Taxon: *Camelops* sp.

Source: C. A. Repenning (pers. comm. 1989)

**San Felipe, Gilroy:** UCMP V65061

Relative age: Rancholabrean

Taxon: *Platygonus* sp.

Source: TAXIR

**Santa Clara Valley:** SU

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Stanford University, Corte de Madera Creek:**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: Hay (1927)

**Sunnyvale Sewer, Sunnyvale:** USGS 1218

Relative age: Rancholabrean, Wisconsinan

Taxa: *Spermophilus beldingi*

*Thomomys bottae*

*Ursus* sp.

*Mammuthus columbi*

*Equus* sp.

*Camelops* sp.

*Bison* sp.

Source: C. A. Repenning (pers. comm. 1989)

**Veterans Hospital, Matadero Creek:** USGS 1001, 1202

Relative age: Rancholabrean

Taxa: *Paramylodon harlani*

*Sylvilagus* sp.

*Reithrodontomys* sp.

*Neotoma fuscipes*

*Mammuthus* sp.

*Equus* sp.

*Capromeryx* sp.

SANTA CRUZ COUNTY

**Aptos:** SU

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: Hay (1927)

**Santa Cruz:**

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: Hay (1927)

SHASTA COUNTY

**Cave Bear Cave:** USNM

Relative age: Rancholabrean

Taxa: *Procyon lotor*  
*Arctodus* sp.

Sources: Gidley (1906), Harris (1985)

**Cave 1011, Squaw River:** UCMP 1011

Note: Specimen/s not listed in UCMP TAXIR database.

**Dekkas Cave, Squaw River:** UCMP V35022

Relative age: Rancholabrean

Taxa: *Sylvilagus* sp.  
*Lepus* sp.  
*Erethizon* sp.  
*Lutra canadensis*  
*Odocoileus* sp.

Source: TAXIR

**Galen's Pit, Squaw River:** UCMP V75068

Relative age: Rancholabrean

Taxon: *Charina* sp. cf. *C. bottae*  
*Scapanus latimanus*  
*Microtus* sp.\*  
*Equus* sp. cf. *E. occidentalis*\*

Source: TAXIR, Bell and Mead (1996)\*

**Holden Cave, McCloud River:** UCMP V4001 (0401)

Relative age: Rancholabrean

Taxa: *Crotalus* sp. *Lepus* sp.  
*Aplodontia* sp.  
*Spermophilus* sp.  
*Glaucomyx sabrinus*  
*Thomomys* sp.  
*Neotoma* sp.  
*Ursus americanus*  
*Spilogale putorius*  
*Odocoileus* sp.

Source: TAXIR

**MacArthur, Fall River Valley:** UCMP V33017

Relative age: Rancholabrean

Taxon: *Bison latifrons*

Sources: TAXIR, Vanderhoof (1942), McDonald (1981)

**Potter Creek Cave, Baird:** LACM 5357; UCMP 1055

Relative age: Rancholabrean, Wisconsinan

Taxa: *Acipenser transmontanus*  
*Mylopharodon conocephalus*  
*Ptychocheilus* sp.  
*Oncorhynchus tshawytscha*  
*Dicamptodon ensatus*

*Bufo boreas*  
*Clemmys* sp.  
*Crotalus potterensis* (type locality)  
*C. viridis*  
*Coragyps occidentalis*  
*Cathartes aura*  
*Catharista shastensis*  
? *Gymnopyps amplus*  
*Buteo jamaicensis*  
*Falco peregrinus*  
*F. sparverius*  
*Bubo sinclairi* (type locality)  
*Otus kennicotti*  
*Branta canadensis*  
*Bonasa umbellus*  
*Dendragapus obscurus*  
? *Meleagris* sp.  
*Oreortyx pictus*  
*Colaptes auratus*  
*Corvus brachyrhynchos*  
*Scapanus latimanus*  
*Antrozous pallidus*  
*Desmodus stocki*  
*Megalonyx jeffersonii*  
*Nothrotheriops shastensis* (type locality)  
*Sylvilagus audubonii*  
*S. bachmani*  
*Lepus californicus*  
*Aplodontia rufa*  
*Marmota flaviventris*  
*Spermophilus beecheyi*  
*S. lateralis*  
*Tamias* sp.  
*Tamiasciurus douglasi*  
*Glaucomys sabrinus*  
*Thomomys bottae*  
*T. microdon* (type locality)  
*Neotoma cinerea*  
*Microtus californicus*  
*Erethizon* sp.  
*Canis latrans*  
*C. lupus*  
*C. dirus*  
*Vulpes vulpes*  
*Urocyon cinereoargenteus*  
*Arctodus simus*  
*Ursus americanus*  
*Procyon lotor*  
*Bassariscus astutus*  
*Mustela frenata*  
*Martes nobilis*  
*Taxidea taxus*  
*Spilogale* sp.

*Mephitis mephitis*  
*Panthera atrox*  
*Felis concolor*  
*Lynx rufus*  
*Mammut americanum*  
*Mammuthus columbi*  
*Equus occidentalis*  
*E. pacificus*  
*Platygonus* sp.  
Camelidae  
*Odocoileus* sp. (A)  
*Odocoileus* sp. (B)  
*Bison* sp.  
*Oreamnos americanus*  
*Euceratherium collinum*  
*Ovis* sp.

Sources: Sinclair (1903, 1904, 1905), Miller (1911b), Kellogg (1912), Stock (1918), Hay (1927), Miller and DeMay (1942), Brattstrom (1954, 1958), Hutchison (1967b), Kurten and Anderson (1980), Lundelius *et al.* (1983), Harris (1985), Mead and Lawler (1995)\*, McDonald (2003)\*

**Samwell Cave Numbers 1-3, McCloud River:** UCMP 1008-1009, 1057, V65217

Relative age: Rancholabrean, late Wisconsinan

Radiometric dates:  $^{14}\text{C}$  17,880  $\pm$  900, 15,360  $\pm$  500 yr BP

Taxa: *Anserinae* spp.  
*Coragyps occidentalis*  
*Cathartes aura*  
*Catharista shastense* (type locality)  
*Gymnogyps amplus*  
? *Buteo swainsoni*  
*Accipiter striatus velox*  
*Falco sparverius*  
*Dendragapus obscurus*  
*Meleagris* sp.  
*Oreortyx pictus*  
*Otus flammeolus*  
*Bubo virginianus*  
*B. sinclairi*  
*Asio otus*  
*Glaucidium gnoma*  
*Colaptes auratus*  
*Cyanocitta stelleri*  
*Scapanus latimanus*  
*Homo sapiens*  
*Megalonyx* sp.  
*Nothrotheriops shastensis*  
*Sylvilagus audubonii*  
*S. bachmani*  
*Lepus californicus*  
*Aplodontia rufa*  
*Marmota* sp.  
*Sciurus griseus*  
*Spermophilus beecheyi*



*S. lateralis*  
*Tamias* sp.  
*Tamiasciurus douglasi*  
*Glaucomys sabrinus*  
*Thomomys bottae*  
*T. microdon*  
*T. monticola*  
*Castor canadensis*  
*Peromyscus maniculatus*  
*Neotoma cinerea*  
*N. fuscipes*  
*Microtus californicus*  
*Erethizon dorsatum*  
*Canis latrans*  
*C. lupus*  
*C. dirus*  
*Vulpes* sp.  
*Urocyon cinereoargenteus*  
*Arctodus* sp.  
*Ursus americanus*  
*U. arctos horribilis*  
*Procyon lotor*  
*Mustela frenata*  
*Mustela* sp.  
*Martes nobilis*  
*Mephitis mephitis*  
*Spilogale putorius*  
*Lutra canadensis*  
*Felis* sp. cf. *F. concolor*  
*Mammuthus* sp.  
*Equus occidentalis*  
*Cervus* sp.  
*Odocoileus* sp. (A)  
*Odocoileus* sp. (B)  
*Oreamnos americanus*  
*Euceratherium collinum*

Sources: Miller (1911b), Stock (1918), Hay (1927), Miller and DeMay (1942), Paynen *et al.* (1978), Kurten and Anderson (1980), Lundelius *et al.* (1983), Harris (1985), (Mead and Lawler (1995), McDonald (2003)\*, Blois, J., E. Hardy, J. McGuire, and A. Barnosky (2008)\*

**Shasta County:** SFMM

Relative age: Rancholabrean

Taxon: *Mammut americanum*

**Stone Man Cave, McCloud River:** LACM(CIT) 414; UCMP 1010

Relative age: Rancholabrean

Taxa: *Gymnogyps amplius*  
*Dendragapus fuliginosus*  
*Columba fasciata*  
 Rodentia  
*Arctodus* sp.  
*Equus* sp.  
*Odocoileus* sp.

Sources: Furlong (1941), Lundelius *et al.* (1983)

SIERRA COUNTY

**Brandy City: MCZ**

Relative age: uncertain

Taxon: *Equus* sp.

Source: Hay (1927)

SISKIYOU COUNTY

**Fossil Cave, Lava Beds National Monument: UCMP V34024**

Relative age: Rancholabrean

Age estimate: 40,000 to 30,000 yr BP

Taxa: Ursidae

*Mammut americanum*

*Camelops* sp.

Sources: TAXIR, \*Santucci *et al.* (2001)

**Gottville Centennial Mine (Honolulu Centennial Mine): CAS; UCMP V69175**

Relative age: Rancholabrean

Taxa: *Bison antiquus*

*Euceratherium* sp.

Sources: Hay (1927), McDonald (1981), Harris (1985)

**Hornbrook: UCMP V36028**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: TAXIR

**Klamath River, Gottville:**

Relative age: Rancholabrean

Taxon: *Euceratherium collinum*

Source: Stock and Furlong (1927)

**Oakbar (Oak Bar): USNM**

Relative age: Rancholabrean

Taxon: *Bison antiquus*

Sources: Hay (1927), McDonald (1981)

**Top of Lava, Penoyar: UCMP V66134**

Relative age: Rancholabrean

Taxon: Cyprinidae

Source: TAXIR

**Walker:**

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: Hay (1927)

**Yreka, Klamath River:**

Relative age: Rancholabrean

Taxon: *Paramylodon* sp.

Source: Hay (1927)

SISKIYOU OR MODOC COUNTY

**Tule Lake:** UCMP V61009  
Relative age: Rancholabrean  
Taxon: Proboscidea

SOLANO COUNTY

**Benicia RR Yard:** UCMP V68038  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Bottle Hill, Benicia:**  
Relative age: Rancholabrean  
Taxa: *Mammut* sp.  
*Mammuthus columbi*  
*Equus* sp.  
Sources: Hay (1927), Savage (1951)

**Carquinez Strait North Shore:**  
Relative age: Rancholabrean  
Taxon: *Mammut* sp.  
Source: Savage (1951)

**Collinsville:** UCMP V37019  
Relative age: Rancholabrean  
Taxa: *Mammuthus* sp. cf. *M. columbi*  
*Equus* sp.  
Source: TAXIR, Savage (1951)

**Mare Island:**  
Relative age: uncertain, Irvingtonian or Rancholabrean  
Taxa: *Mammuthus* sp.  
*Equus* sp.  
Source: Hay (1927)

**Montezuma Hills Number 1, Antioch:** UCMP V55010  
Geologic formation: Montezuma Formation  
Relative age: Rancholabrean  
Taxa: *Equus* sp.  
*Camelops* sp.  
*Cervus* sp.  
Source: TAXIR

**Powder Works, Benicia:** UCMP 527  
Relative age: Rancholabrean  
Taxon: *Bison* sp.  
Source: TAXIR

**\*Putah Creek 2-4, Davis:** UCMP V69182-69184  
Geologic formation: Montezuma Formation  
Relative age: late Sangamon, <sup>18</sup>O stage 5a, Rancholabrean  
Radiometric date: U/Th 77.664 ± .404, 81.818 ka BP  
Taxa: *Paramylodon* sp.  
*Mammuthus* sp.

Source: TAXIR, Dundas and Cunningham (1993)  
**Rio Vista Number 2:** UCMP V65617; USNM  
Relative age: Rancholabrean  
Taxon: *Mammuthus columbi*  
Source: Hay (1927)

**Suisun Creek, Suisun:** UCMP 65183  
Relative age: Rancholabrean  
Taxon: *Equus pacificus*  
Source: TAXIR

**Suisun Slough, Suisun:** UCMP 27003  
Relative age: Rancholabrean  
Taxa: *Paramylodon* sp.  
*Nothrotheriops* sp.  
*Mammuthus* sp.  
*Equus* sp.  
Sources: TAXIR, Hay (1927), Savage (1951)  
Note: Listed under Contra Costa County by Hay (1927).

#### SONOMA COUNTY

**Agua Rico Ranch, Sonoma:** UCMP 1380  
Relative age: Rancholabrean  
Taxa: *Clemmys* sp.  
*Equus* sp.  
*Odocoileus* sp.  
Source: TAXIR

**Cardinaux, Petaluma:** UCMP V80005  
Relative age: ? early Holocene  
Taxon: *Bison bison*  
Source: TAXIR

**Crandall (? Santa Rosa):** UCMP V36050  
Relative age: Rancholabrean  
Taxon: *Paramylodon* sp.  
Source: TAXIR

**Ducker Ranch, Petaluma:** UCMP V65017  
Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
Source: TAXIR

**Ebibias Creek, Sebastopol:** UCMP V72107  
Relative age: Rancholabrean  
Taxa: *Equus* sp.

Bovidae

Source: TAXIR

**Eureka School, Petaluma:** UCMP V36046

Relative age: Rancholabrean

Taxa: *Equus* sp.  
*Bison* sp.

Source: TAXIR, Savage (1951)

**Five Oaks Ranch, Cloverdale:** UCMP V52013

Relative age: Rancholabrean

Taxon: *Mammot americanum*

Source: TAXIR

**Griffeth Park, Santa Rosa:**

Relative age: uncertain

Taxon: Proboscidea

Source: Savage (1951)

**\*Mammoth Rocks:**

Relative age: Wisconsinan

Taxa: Mammalia (large-size) (rubs)

Source: Parkman (2002)

**McGrew's Ranch, Petaluma:** UCMP 3023

Relative age: Rancholabrean

Taxon: *Paramylodon* sp. cf. *P. harlani*

Source: TAXIR, Savage (1951)

**Petaluma:** UCMP V67075:

Relative age: uncertain

Taxon: *Mammot* sp.

Source: TAXIR, Hay (1927)

**\*Sonoma Coast State Beach:**

Relative age: Rancholabrean

Age estimate: > 100 kyr

Taxon: ? *Mammuthus* sp. (ichnite rub)

Source: B. Parkman (pers. comm. 2001)

## STANISLAUS COUNTY

**Brant Ranch:** UCMP V72008

Geologic formation: Riverbank Formation

Relative age: Rancholabrean

Taxon: *Paramylodon harlani*

Source: TAXIR

**Del Puerto Creek:** UCMP V31007

Relative age: Rancholabrean

Taxon: *Equus* sp.

**Delta Mendota Numbers 13-17, 19, La Grange:** UCMP V48007-48011, V48019

Relative age: Rancholabrean

Taxa: *Thomomys* sp.  
*Mammuthus* sp.  
*Equus* sp.  
*Bison antiquus*

**Dry Creek:** UCMP V65259

Relative age: Rancholabrean

Taxon: *Mammuthus columbi*

Source: TAXIR

**Garber Farm:** UCMP V72007

Geologic formation: Modesto Formation

Relative age: Rancholabrean

Taxa: *Megalonyx jeffersoni*  
*Mammuthus columbi*

Source: TAXIR

**Harpster Cow Pond:** UCMP V75065

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR

**Hetch Hetchy Tunnel, Knights Ferry (Hetchei Hetchie Tunnel):** UCMP V33015

Relative age: Rancholabrean

Taxon: *Camelops* sp. cf. *C. hesternus*

Source: TAXIR

**Longo:** UCMP V54034

Relative age: Rancholabrean

Taxa: Camelidae  
*Bison* sp.

Source: TAXIR

**McMannis Ranch:** UCMP V72186

Geologic formation: Modesto Formation

Relative age: Rancholabrean

Taxon: *Bison* sp.

Source: TAXIR

**Modesto:** UCMP V39059

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: TAXIR

**Modesto Sanitary Landfill, Modesto:**

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: R. Hilton (pers. comm. 1989)

Note: The specimen was not collected (Hilton pers. comm. 1989).

**North Avenue, Modesto:** UCMP V81120

Relative age: Rancholabrean  
Taxon: *Bison* sp.  
Source: TAXIR

**Patterson Ranch Well:** UCMP V68008  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Woodland Avenue, Modesto:** UCMP V81119  
Relative age: Rancholabrean  
Taxon: *Camelops hesternus*  
Source: TAXIR

#### SUTTER COUNTY

**Marysville Buttes** (Sutter Buttes): UCMP V40043  
Relative age: Rancholabrean  
Taxon: Equidae  
Source: TAXIR

**Oswald Road, Yuba City:** UCMP V39015  
Relative age: Rancholabrean  
Taxon: *Bison latifrons*  
Source: TAXIR

#### TEHAMA COUNTY

**Digger Creek:** USNM  
Relative age: Rancholabrean  
Taxon: *Equus occidentalis*  
Source: Hay (1927)

**Red Bluff:** SDSNH  
Relative age: uncertain  
Taxon: *Equus* sp.

#### TRINITY COUNTY

**Douglas City:** USNM  
Relative age: Rancholabrean  
Taxa: *Megalonyx* sp.  
*Mammuthus* sp.  
*Odocoileus* sp.  
Source: Hay (1927)

#### TULARE COUNTY

**\*Bear Den Cave:**  
Relative age: early mid-Holocene  
Radiometric date: 7,220 cal BP  
Taxon: *cf. Aneides ferreus* or *cf. A. vagrans*  
*Batrachoseps gregarius*

*B. kawia*  
*B. regius*  
*B. relictus*  
*B. simatus*  
*Ensatina eschscholtzi*  
*Hydromantes platycephalus*  
*Plethodon* sp.  
*Taricha torosa*  
*Sceloporus graciosus*  
*S. occidentalis*  
*Uta stansburiana*  
*Phrynosoma coronatum*  
*Eumeces skiltonianus*  
*E. gilberti*  
*Cnemidophorus tigris*  
*Anniella pulchra*  
*Elgaria coerulea*  
*E. multicaudata*  
*Diadophis punctatus*  
*Hypsiglena torquata*  
*Tantilla hobartsmithi*  
*Coluber constrictor*  
*Cortina tenuis*  
*Masticophis lateralis*  
cf. *Pituophis* sp.  
*Lampropeltis getulus*  
*Lampropeltis zonata*  
*Rhinocheilus lecontei*  
*Thamnophis couchii*  
*T. sirtalis*  
*T. elegans*  
*Crotalus viridis*  
*Crotalus* sp.  
*Antrozous pallidus*  
*Corynorhinus townsendii*  
*Eptesicus fuscus*  
*Euderma maculatum*  
*Lasionycteris noctivagans*  
*Lasiurus blossevillii*  
*L. cinereus*  
*Myotis* spp. (seven species)  
*Pipistrellus hesperus*  
*Aplodonta rufa*  
*Glaucomys sabrinus*  
*Sciurus griseus*  
*Sciurus* sp.  
*Eutamias alpinus*  
*E. amoenus*  
*E. merriami*  
*E. minimus*  
*E. quadrimaculatus*  
*E. senex*  
*E. umbrinus*  
*Tamiasciurus douglasi*



*Marmota flaviventris*  
*Spermophilus beecheyi*  
*S. beldingi*  
*S. lateralis*  
*Thomomys bottae*  
*T. monticola*  
*Chaetodipus californicus*  
*Dipodomys heermanni*  
*Castor canadensis*  
*Perognathus californicus*  
*Reithrodontomys megalotis*  
*Peromyscus boylii*  
*P. californicus*  
*P. maniculatus*  
*P. truei*  
*Phenacomys intermedius*  
*Neotoma cinerea*  
*N. fiscipes*  
*N. lepida*  
*Microtus californicus*  
*M. longicaudus*  
*M. montanus*  
*Zapus princeps*  
*Erethizon dorsatum*  
*Canis latrans*  
*Urocyon cinereoargenteus*  
*Vulpes vulpes*  
*Ursus americanus*  
*U. arctos*  
*Procyon lotor*  
*Bassariscus astutus*  
*Gulo gulo*  
*Lontra canadensis*  
*Martes americana*  
*M. pennanti*  
*Mustela erminea*  
*M. frenata*  
*M. vison*  
*Taxidea taxus*  
*Spilogale putorius*  
*Mephitis mephitis*  
*Felis concolor*  
*Lynx rufus*

Sources: Santucci et al. (2001), Mead et al. (2006)

**\*Carmoe Crevice:**

Relative age:

Taxon: Mammalia

Source: Santucci et al. (2001)

**\*Crystal Cave:**

Relative age:

Radiometric date: 172,000 yr BP U/Th

Taxon: Rodentia

Source: Santucci *et al.* (2001)

**Delano:** LACM 1156  
Relative age: Rancholabrean  
Taxon: *Equus* sp.

**Denton's Farm, Badger:** UCMP V78124  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Earlimart** (Earlimont): UCMP V69173  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Exeter Numbers 1-2:** UCMP V39031, V68037  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Flynn Ranch, Fountain Springs:** LACM 6701  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.

**Friant-Kern Canal Number 1, Exeter:** UCMP V49003  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: TAXIR

**Gordon Gulch, Lindsay:** UCMP V69174  
Relative age: Rancholabrean  
Taxa: *Mammuth americanum*  
*Mammuthus columbi*  
Source: TAXIR

**Kaweah South Fork, Three Rivers** (Kaweah River South Fork): UCMP V56034  
Relative age: Rancholabrean  
Taxon: *Equus* sp.  
Source: TAXIR

**Kings Canyon Number 8a:** UALP  
Relative age: Rancholabrean, Wisconsinan  
Radiometric dates:  $^{14}\text{C} \geq 45,000, \geq 30,000$  yr BP  
Taxa: *\*Hydromantes* sp.  
*Gerrhonotus* sp. cf. *G. multicarinatus*  
*Sceloporus* sp. cf. *S. occidentalis*  
*Thamnophis* sp.  
*Thomomys* sp.  
*Neotoma* sp. cf. *N. cinerea*  
Sources: \*Cole (1983), Mead *et al.* (1985), \*FAUNMAP (1992), \*Santucci *et al.* (2001)

\***Lang Cave, Sequoia:** (P. Orr, Santa Barbara Natural History Museum)

Taxon: *Paramylodon harlani*  
Sources: Orr (? 1940's), R. Rye (pers. comm. 1991), Santucci *et al.* (2001)

**\*Lilburn Cave:**

Relative age:  
Taxon: Mammalia  
Source: Santucci *et al.* (2001)

**\*Pet Cemetery:**

Relative age:  
Taxon: Cervidae (deer)  
Source: Santucci *et al.* (2001)

**Strathmore:** UCMP V65309  
Relative age: Rancholabrean  
Taxon: *Camelops* sp.  
Source: TAXIR

**Tipton:** UCMP V55068  
Relative age: Rancholabrean  
Taxa: Proboscidea  
*Equus* sp.  
*Camelops* sp.  
Source: TAXIR

**Tulare County:** LACM(CIT) 117; UCMP V65040  
Relative age: uncertain  
Taxon: *Equus* sp.

**White River:** LACM 4088  
Relative age: Rancholabrean  
Taxa: *Mammuthus columbi*  
*Bison antiquus*  
Sources: Hay (1927), McDonald (1981), Harris (1985)

TUOLUMNE COUNTY

**Columbia:** UCMP V65647  
Relative age: Rancholabrean  
Taxa: *Mammuthus* sp.  
*Equus occidentalis*  
Source: TAXIR, Hay (1927)

**Gold Springs Gulch, Columbia:** UCMP V65516  
Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
Source: TAXIR

**Gordon Gulch** (?= Gordon Gulch, Tulare County): (?= UCMP 69174)  
Relative age: Rancholabrean  
Taxon: *Equus pacificus*  
Source: Hay (1927)

**Jamestown:** YPM  
Relative age: Rancholabrean  
Taxon: *Mammut* sp.  
Source: Hay (1927)

**Kincaid Flat, Groveland:** UCMP V65041  
Relative age: Rancholabrean  
Taxa: *Mammut americanum*  
*Mammuthus* sp.  
*Equus* sp.  
Camelidae  
*Bison latifrons*  
Source: TAXIR, Hay (1927)

**Matlock Gulch:**  
Relative age: Rancholabrean  
Taxon: *Equus occidentalis*  
Source: Hay (1927)

**Mclean's Cave, Columbia:** UCMP V77090  
Relative age: Rancholabrean  
Taxon: *Euceratherium collinum*  
Source: TAXIR

**Mojave Valley:**  
Relative age: uncertain  
Taxon: *Equus* sp.  
Source: Hay (1927)  
Note: Location is uncertain.

**Mormon Flat:**  
Relative age: Rancholabrean  
Taxon: *Mammut americanum*  
Source: Hay (1927)

**Saw-mill Flat:**  
Relative age: Rancholabrean  
Taxon: *Bison* sp.  
Source: Hay (1927)

**Shaw's Flat, Sonora:**  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: Hay (1927)

**Sonora (Stent):** SCGD  
Relative age: Rancholabrean  
Taxa: *Mammut americanum*  
*Mammuthus* sp.  
*Tapirus* sp.  
*Equus occidentalis*  
*Camelops* sp.  
*Bison antiquus*

Sources: Hay (1927), R. Hilton (pers. comm. 1989), Jefferson (1989b)

**Soulsbyville:**

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Hay (1927)

**Stony Gulch Cave:** UCMP V57060

Relative age: Rancholabrean

Taxon: *Tapirus* sp.

Source: TAXIR, Jefferson (1989b)

**Table Mountain:** UCMP V69180

Relative age: Rancholabrean

Taxa: *Equus* sp.

*Camelops* sp. cf. *C. minidokae*\*

Source: TAXIR, Hay (1927)

**Texas Flat:**

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Equus* sp.

Source: Hay (1927)

**Tuolumne County:** MCZ; UCMP V65038

Geologic formation: Auriferous gravels (informal)

Relative age: Rancholabrean

Taxa: *Mammut* sp.

*Equus occidentalis* (type locality)

Source: Hay (1927)

**Tuttletown:**

Relative age: Rancholabrean

Taxon: *Mammut* sp.

Source: Hay (1927)

**Woods Creek, Columbia:** UCMP V65033

Relative age: Rancholabrean

Taxon: *Tapirus californicus* (type locality)

Sources: TAXIR, Merriam (1913a), Jefferson (1989b)

**Yorktown Gulch, Columbia:** UCMP V69179

Relative age: Rancholabrean

Taxon: *Mammut americanum*

Source: TAXIR, Hay (1927)

VENTURA COUNTY

**Anacapa Island:** LACM 1642, 1928

Relative age: Rancholabrean

Taxon: *Chendytes lawi*

*Peromyscus anacapahensis* (type locality)

Source: Miller *et al.* (1961) White (1966)

**Beardsley Wash, Camarillo:** UCMP V56097

Geologic formation: Las Posas Formation

Relative age: Rancholabrean

Taxon: Proboscidea

Source: TAXIR

**\*Big Sky Ranch,** Erringer Road, Simi Valley: LACM

Relative age: Rancholabrean

Age estimate: 30 kyr BP

Taxon: ? *Mammut americanum*

Source: Kelley (?2003)

Note: SWCA project

**Bolsa Chica State Park:** LACM 6912

Relative age: Rancholabrean

Taxa: *Paramylodon* sp.

*Mammuthus* sp.

*Bison* sp.

**Brea Canyon, Simi Valley:** LACM(CIT) 153, LACM 65114

Relative age: Rancholabrean

Taxa: *Paramylodon* sp.

*Equus* sp.

*Artiodactyla* (large-size)

**Camarillo:** LACM(CIT) 586

Relative age: Rancholabrean

Taxon: *Mammut* sp.

**Camarillo Hills:**

Geologic formation: Las Posas Formation

Relative age: Rancholabrean

Taxon: *Equus* sp. cf. *E. occidentalis*

Source: Pressler (1924)

**Camarillo, Las Posas Estates:** B. Benson private collection, Ojai, California

Relative age: Rancholabrean

Taxa: *Mammuthus* sp.

*Equus* sp.

Source: B. Benson (pers. comm. 1986)

**Conejo Valley, Newbury Park:** LACM 1680

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

*Equus* sp.

**Las Posas Hills:**

Geologic formation: Las Posas Formation

Relative age: Rancholabrean

Taxon: *Equus* sp.

Source: Pressler (1924)

**Long Canyon, Santa Clara Valley** (Wiggens Canyon): LACM 6470

Geologic formation: ? Saugus Formation

Relative age: uncertain

Taxon: *Equus* sp.

**Moorpark:** LACM(CIT) 560

Relative age: Rancholabrean

Taxon: *Equus* sp.

\*Note: see possibly associated with Irvingtonian Moorepark *Mammuthus meridionalis*

**Pierpoint Bay, Ventura:** UCMP V58009

Relative age: Rancholabrean

Taxa: Otariidae or Phocidae

*Equus* sp.

cf. *Bison* sp.

Source: TAXIR

**San Buenaventura:**

Relative age: Rancholabrean

Taxa: *Eumetopias* sp.

*Mammut* sp.

*Equus occidentalis*

*Camelops* sp.

Source: Hay (1927)

**San Nicolas Island:** UCMP V41007

Relative age: Rancholabrean

Taxon: *Mammuthus* sp.

Source: TAXIR

**San Nicolas Island Number 1:** UCMP V57056

Relative age: Rancholabrean

Taxon: *Chendytes milleri*

Source: TAXIR

**San Nicolas Island, Cormorant Point:** LACMIP 12005

Geologic formation: first marine terrace

Relative age: Rancholabrean, substage 5a (85-80 ka BP)

Taxon: Aves

Source: G. L. Kennedy (pers. comm. 1989)

**San Nicolas Island, Viscaino Point:** LACMIP 12003

Geologic formation: unnamed eolianite

Relative age: Rancholabrean, Wisconsinan

Taxa: *Synthliboramphus caverii*

*Ptychoramphus aleuticus*

Source: G. L. Kennedy (pers. comm. 1989)

**San Nicolas Island, Kitchen Middens:** UCMP V78030

Relative age: ? early Holocene

Taxon: *Chendytes lawi*

Source: TAXIR

Note: Locality is uncertain.

**San Nicolas Island East End:** LACMIP 11753  
Geologic formation: third marine terrace (informal)  
Relative age: Rancholabrean, stage 9 (350-300 ka BP)  
Taxon: Aves  
Source: G. L. Kennedy (pers. comm. 1989)

**San Nicolas Island West End:** LACMIP 10623; LACM 5541  
Geologic formation: unnamed eolianite  
Relative age: Rancholabrean, Wisconsinan, stage 3 (50-30 ka BP)  
Taxon: *Fratercula dowi* (type)\*  
Source: G. L. Kennedy (pers. comm. 1989), Guthrie et al. (2002)\*

**Santa Paula:**  
Relative age: Rancholabrean  
Taxon: *Equus occidentalis*  
Source: Hay (1927)

**Triunfo Corner and Potrero Poad, Thousand Oaks:** LACM 3213  
Relative age: ? Rancholabrean  
Taxon: Edentata

**\*The Lakes, Thousand Oaks:** LACM  
Relative age: ? Rancholabrean  
Taxon: *Mammut americanum*  
Source: Lander (2007)

**Ventura** (?= Ventura below): (?= UCMP 65287)  
Relative age: Rancholabrean  
Taxa: *Mammut* sp.  
*Camelops* sp.  
Source: Hay (1927)  
Note: Locality uncertain, in part included with San Buenaventura and Santa Paula.

**Ventura** (?= San Buenaventura and/or Ventura): UCMP V65287  
Relative age: Rancholabrean  
Taxa: *Mammuthus* sp.  
*Camelops* sp.  
Source: TAXIR

**Ventura, Foothills Street:** VCM  
Relative age: Rancholabrean  
Taxon: *Mammuthus* sp.  
Source: B. Benson (pers. comm. 1986)

#### YOLO COUNTY

**Black's Station:** USNM  
Relative age: Rancholabrean  
Taxon: *Mammuthus columbi*  
Source: Hay (1927)

**Putah Creek Nursery, Davis:** UCMP V6911



Relative age: late Sangamon\*, <sup>18</sup>O stage 5a\*, Rancholabrean  
Geologic formation: Montezuma Formation  
Taxon: *Mammuthus* sp.  
Source: TAXIR, Dundas and Cunningham (1993)\*  
Note: Locality number reported as V69011 in 1991.

**Putah Creek Number 1, Davis:** UCMP V5430  
Geologic formation: Montezuma Formation  
Relative age: late Sangamon\*, <sup>18</sup>O stage 5a\*, Rancholabrean  
Taxon: *Smilodon* sp.  
Source: TAXIR, Dundas and Cunningham (1993)\*  
Note: Locality number reported as V54030 in 1991.

**\*Stevenson Creek Bridge, Davis** (Stevens Creek Bridge): UCMP V76199  
Relative age: Rancholabrean  
Taxa: *Paramylodon harlani*  
*Mammuthus columbi*  
Source: TAXIR, Dundas and Cunningham (1993)\*

**Tule Canal, Dixon:** UCMP V65241  
Relative age: Rancholabrean  
Taxon: *Cervus* sp.  
Source: TAXIR

**Woodland:** UCMP 34002  
Relative age: Rancholabrean  
Geologic formation: ? Red Bluff Formation  
Taxon: *Equus* sp.  
Source: TAXIR

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