

Figs. 24 - 27. *Crassatella mercedensis* ANDERSON, 1958; x 1; UCLA loc. 6486, north shore of Lake Nacimiento, Tierra Redonda Mtn. Quad.; 24 - 25. LACMIP 7553; 26 - 27 LACMIP 7554.

Turritella chaneyi orienda SAUL, 1983. Figures 28 - 30. This late (but not latest) Maastrichtian subspecies is also found at the base of the San Francisquito Formation on Warm Springs Mountain, Los Angeles County, and Chimineas Ranch, San Luis Obispo County.

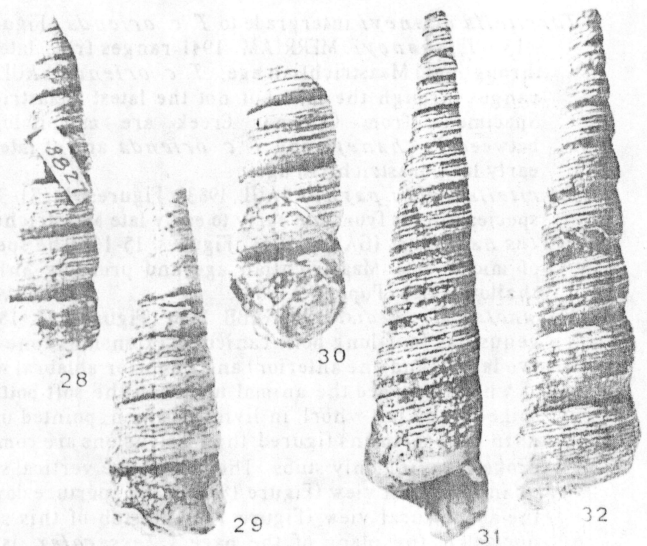
Turritella webbi paynei SAUL, 1983. Figures 31 - 32.
Polinices (Polinices) n. sp.

Scaphopods

Pachydiscus (Neodesmoceras) sp.

DIP CREEK

The Dip Creek fauna is both fascinating and frustrating. Taliaferro (1944, p. 516) credits B. L. Clark, H. G. Schenck, C. W. Merriam, and A. Myra Keen with the identifications for his check list. Although he does not so state, material from the ridge west of Godfrey Road is apparently included. The Dip Creek fauna contains some mollusks that resemble genera or species usually considered to indicate a Paleocene age, as well as some indicative of a Cretaceous age. Identification is impeded by the hard, light colored matrix that does not contrast strongly with the specimens and the broken and somewhat etched nature of most specimens. Taliaferro did not construe the mixture of ages to indicate closeness to the Cretaceous-Tertiary boundary. He apparently interpreted the mixture as redeposition of Cretaceous rocks into Paleocene age sediments as evidenced by his "print of a Cretaceous ammonite . . . in a block of Asuncion" in the Dip Creek conglomerate (Taliaferro, 1944, p. 514). Within these sediments there is not, however, a segregation of "Cretaceous



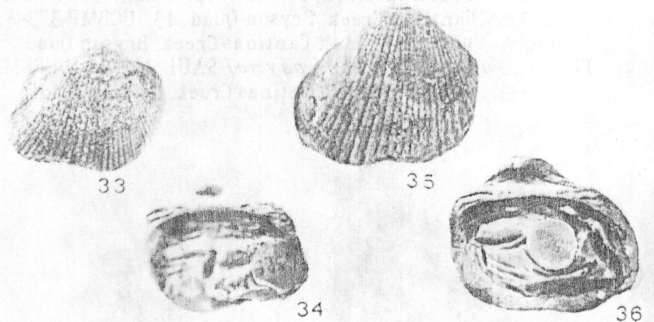
Figs. 28 - 30. *Turritella chaneyi orienda* SAUL, 1983; x 1; UCLA 58827, UCLA loc. 6486, north shore of Lake Nacimiento, Tierra Redonda Mtn. Quad. 29 - 30. USGS loc. M6588, north shore of Lake Nacimiento, Tierra Redonda Mtn. Quad. 29 USNM 307678, 30 USNM 307679.

Figs. 31 - 32. *Turritella webbi paynei* SAUL, 1983; x 1; UCLA loc. 6486, north shore of Lake Nacimiento, Tierra Redonda Mtn. Quad. 31 UCLA 58778, 32 UCLA 58779. Figs. 33 - 34. *Cucullaea mathewsonii* GABB, 1864; x 1; LACMIP 7555; UCLA loc. 6525, Dip Creek, Lime Mtn. Quad.

forms" from "Paleocene forms". Part of a *Neophylloceras?* was found in a shared matrix jumbled with *Calva* cf. *C. varians* and *Turritella peninsularis adalaidana*. All indicators suggest that these beds are very late Cretaceous. The Cretaceous/Tertiary boundary may be within the Dip Creek section above the occurrence of the ammonites. Beds containing a similar fauna, except that no ammonite has been recovered, are found low in the San Francisquito Formation on Warm Springs Mountain in Los Angeles County.

Specimens from several localities are included in the following annotated list of fossils from Dip Creek.

Cucullaea mathewsonii GABB, 1864. Figures 33-34. The species is found widely in Paleocene strata of California and Baja California. Not previously known from the Cretaceous. "*Nemodon*" *morani* (WARING, 1917). Figures 35-36. A species found in Paleocene strata of southern California and northern Baja California. Not previously recorded from the Cretaceous.



Figs. 33 - 34. *Cucullaea mathewsonii* GABB, 1864; x 1; LACMIP 7555; UCLA loc. 6525, Dip Creek, Lime Mtn. Quad.
Figs. 35 - 36. "*Nemodon*" *morani* (WARING, 1917); x 1; LACMIP 7556. UCLA loc. 6525, Dip Creek, Lime Mtn. Quad.