

1864) provide the best indication of geologic age of any of the megafossils found in the Needles–Gray Wolf lithic assemblage. These taxa were found only at USGS loc. M1928. The specimens of *Turritella uvasana* cf. *T. uvasana uvasana* can be only tentatively identified to subspecies because the specimens consist only of the apical whorls. Nevertheless, a comparison with all the known subspecies of *Turritella uvasana* showed that the locality M1928 specimens are most similar to *Turritella uvasana uvasana*. The similarity concerns the whorl profile and the relatively close spacing of the three to four secondary spiral ribs on the posterior half of the juvenile whorls. The anterior half of the juvenile whorls is occupied by three primary spiral ribs. *Turritella uvasana uvasana* is confined to the Tejon Stage, which spans a considerable interval of time from middle middle Eocene through late Eocene (Squires, 1994). *Turritella uvasana uvasana* is a common subspecies in southern and central California (Merriam, 1941), and its geographic range can now be extended tentatively to Washington.

The *Turritella* specimens at USGS loc. M1928 are also similar to certain specimens of *Turritella uvasana chehalisensis* Merriam, 1941. These particular specimens were considered by Merriam (1941) to be “extreme variants” that have the characteristics of *T. uvasana uvasana*. One of these extreme-variant specimens is a paratype of *T. uvasana chehalisensis* and is figured by Merriam (1941, pl. 16, fig. 14). That specimen is from exposures that Pease and Hoover (1957) and Logan (1987) mapped as Skookumchuck Formation just south of Oakville near Balch in the Chehalis Valley, Grays Harbor County, western Washington. This formation is of late middle Eocene age (Armentrout and others, 1983) and correlative to the Tejon Stage. Although it is not possible to resolve whether the USGS loc. M1928 specimens are *Turritella uvasana uvasana* or extreme variants of look-alike *T. uvasana chehalisensis*, the geologic age of the latter is within the range of *T. uvasana uvasana*.

The *Turritella* specimens at USGS loc. M1928 superficially resemble *Turritella porterensis* Weaver (1912), a species known (Armentrout, 1975) from lower Oligocene strata in western Washington. The whorl profile of the *Turritella* specimens at USGS loc. M1928 differs from that of *T. porterensis* by having much weaker and much less well developed spiral ribs on the posterior half of the whorls.

The specimens of ?*Callista andersoni* and ?*Callista conradiana* from USGS loc. M1928 cannot be positively identified because of poor preservation. Both bivalve species are widespread on the Pacific coast of North America, and *Callista conradiana*, like *Turritella uvasana uvasana*, is confined to the Tejon Stage. *Callista andersoni* ranges from the Transition Stage to Tejon Stage (Squires, 1994). Therefore, the geologic age of the megafossils at USGS loc. M1928 is most likely middle middle Eocene to late Eocene (Tejon Stage).

The single specimen of *Crepidula*? sp. found at USGS loc. M1928 is a large specimen (37.6 mm long) embedded in matrix, but cleaning this specimen to make a positive generic and specific identification would destroy it.

The bivalve *Acila (Truncacila) decisa* is the dominant faunal component at the localities in the vicinity of Mount Baldy. The geologic range of this species is late Paleocene through the late Eocene (Squires and Goedert, 1994). The specimens in the Mount Baldy area must be either the same age as or younger than the middle middle Eocene to late Eocene rocks at USGS locality M1928 in the lower part of the unit because the specimens are from near the top of the Needles–Gray Wolf unit.

Table 2. Megafossils from localities in the Mount Baldy area in the eastern part of the Needles–Gray Wolf lithic assemblage, eastern core of the Olympic Mountains. The number of specimens of each species is also given

Taxa	Localities:	USGS M1534	USGS M1535	USGS M1536	CSUN 1598
Foraminiferid					
<i>Bathysiphon</i> sp.				1	1
Gastropods					
<i>Whitneyella</i> ? sp.		—	1		—
<i>Gemma</i> sp.		—	1	—	—
unidentifiable gastropods		1	2	—	1
Bivalves					
<i>Acila (Truncacila) decisa</i> (Conrad)		3	7	1	4
Echinoderms					
unidentifiable fragments		—	—	2	—

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