



FIGURES 7, 12. *Lepas fascicularis* Spengler, showing extreme variations in plate shape. (7) 'typical' form, from Pilsbry, 1907, U.S. Nat. Mus. Bull. 60, pl. 9, fig. 6, capitular height, 20 mm; (12) rarer broad form, from Broch, 1959, Conseil Intern. Explor. de la Mer, Zooplankton 83, fig. 5a, capitular height, 33 mm.

FIGURES 8-10. *Lepas delicatula* Withers, from Withers (1953:pl. 58, figs. 13-14). (8) basal part of carina, greatest length, 6.8 mm; (9) apical part of carina (incomplete), greatest length, 8.8 mm; (10) outer view of basal part of carina shown in fig. 8.

FIGURE 11. *Lepas rovasendai* De Alessandri, from Withers (1953, pl. 58, fig. 4a), height, 4.5 mm.

shape to that of *L. fascicularis*, suggesting that its carina was more angulate than that known for *L. delicatula*. Also, the carinae of *L. delicatula* are heavily calcified, and it is unlikely that associated scuta would be as delicate as those representing *L. latiscutis*.

*Type disposition.* The type and only known lot from the Yorba Member of the Puente Formation is deposited in the Natural History Museum of Los Angeles County, Invertebrate Paleontology collection.

#### Subgenus *LEPAS* Linnaeus, 1758

##### *Lepas (Lepas)* sp.

##### Figures 4-6

*Description.* Scutum subtriangular, taller than broad; umbo basal, apex acute, basal margin straight; exterior ornamented by growth lines and faint radial striae; apico-umbonal ridge indistinct, close to occludent margin. Carina short, convex, broadest in lower third, attenuated apically; basal part unknown.

*Remarks.* The specimens referred to *Lepas (Lepas)* sp. are poorly preserved, but definitely represent a species other than *L. latiscutis*. The two species were not observed to co-occur on the same block of shale, and the density of plates of *Lepas* sp. was considerably less than that of *L. latiscutis*. Among extant species, these specimens most closely approximate *L. anserifera* Linnaeus.

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#### LITERATURE CITED

- DE ALESSANDRI, G. 1895. Contribuzione allo studio dei Cirripedi fossili d'Italia. Boll. Soc. geol. Ital. 13:234-314, pls. 3-5.
- DURHAM, D. L., AND R. F. YERKES. 1964. Geology and oil resources of the eastern Puente Hills area, southern California. U.S. Geol. Surv. Prof. Paper 420-B: 1-62.
- FISCHER, P. 1886. Sur deux espèces de *Lepas* fossiles du Miocène des environs de Bordeaux. Act. Soc. Linn. Bordeaux 40:189-192, pl. 4.
- HALL, T. S. 1902. New or little known fossils from the Tertiaries of Victoria. Proc. Roy. Soc. Victoria (new series) 15:80-85, pl. 11.
- LAWS C. R. 1948. A new fossil cirripede from New Zealand Miocene beds. Trans. Roy. Soc. New Zealand 77: 151-152, text figs. 1-2.
- SEGUENZA G. 1876. Ricerche paleontologiche intorno ai Cirripedi Terziarii della provincia di Messina, pt. 2, Lepadidi. Atti Accad. pontaniana 10:265-481, pls. a-b, 1-10.
- WITHERS T. H. 1953. Catalogue of fossil Cirripedia in the Department of Geology, vol. III. Tertiary. Brit. Mus. (Nat. Hist.), xv + 396 pp., 64 pls.
- ZULLO, V. A. 1969. Thoracic Cirripedia of the San Diego Formation, San Diego County, California. Los Angeles Co. Mus., Contrib. Sci. 159:1-25, figs. 1-77.

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