

March 9, 1961

Dr. Gordon Gunter
Director
Gulf Coast Research Laboratory
Ocean Springs, Mississippi

Dear Dr. Gunter:

The cigar box of oysters arrived safely today. Thank you very much. This oyster certainly is a Pycnodonte and shows the vesicular shell structure very well. Search with the aid of a hand lens for this structure on the inside of the right valve along the margin opposite to the hinge, which we conchologists call the ventral valve margin. It is there, though it happens to be covered by a transparent lamellar shell layer. During the growth of the shell, deposition of vesicular and lamellar layers alternate, and these individuals were caught just when they were covering up the vesicular layer. Nevertheless, the top layer is sufficiently transparent to let one see the vesicular layer beneath.

You have the soft parts of this oyster and have an unparalleled opportunity to check whether or not it has a proximal passage and to investigate various other anatomical features. A thorough investigation would be very important in this case. Can you check whether the adductor muscle has the usual two divisions in two kinds of muscle fibers and what their distribution is. You will note the adductor muscle imprint is almost circular, not kidney-shaped as in Ostrea and Crassostrea. Pycnodonte has a circular muscle imprint.

Thank you for the two references mentioned in your letter. Do you know of any references to the anatomy of Pycnodonte other than Yonge's? Did the Japanese ever investigate their Ostrea imbricata Lamarck, which is a Pycnodonte too?

Best wishes.

Sincerely,

H. B. Stenzel

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Shell Development Company
Exploration & Production Research Division