

SMITHSONIAN MISCELLANEOUS COLLECTIONS

VOLUME 104, NUMBER 16

AN IMPORTANT NEW SPECIES OF OYSTER FROM  
NORTH BORNEO SUITABLE FOR INTRODUCTION  
IN THE PHILIPPINES

(WITH TWO PLATES)

BY

PAUL BARTSCH

Curator of Mollusks and Cenozoic Invertebrates  
U. S. National Museum



(PUBLICATION 3812)

CITY OF WASHINGTON  
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AN IMPORTANT NEW SPECIES OF OYSTER FROM  
NORTH BORNEO SUITABLE FOR INTRO-  
DUCTION IN THE PHILIPPINES

By PAUL BARTSCH

*Curator, of Mollusks and Cenozoic Invertebrates*  
*U. S. National Museum*

(WITH TWO PLATES)

During the cruise of the United States Bureau of Fisheries steamer *Albatross* on its Philippine expedition, we made a stop at Sandakan, British North Borneo. Here on the shore of the bay I found, among other things, shell heaps of a magnificent oyster that forcibly reminded me of our splendid *Ostrea virginica* of the east American shores. This finding was quite a surprise since the many collections of oysters made in the field and markets of the Philippines had always been of the dark, mangrove-attaching forms only, which are usually small and of inferior quality as compared with the present form.

Now that the world appears to have finished its destructive cycle and is again turning to peaceful pursuits, I feel that this species should be brought to the notice of the shellfish industries, for it merits the careful attention now accorded to the Virginia oyster. I believe that there are many places in the Philippines suitable for its introduction.

**OSTREA BENEFICA, new species**

(Plate 1)

Shell large, oval, inequivalved; exterior soiled white; interior porcellaneous, white with the lateral margin pale buff. The left attached valve is moderately deeply cupped; its exterior shows concentric growth lines which are slightly lamellose on the left side, not so on the rest of the shell, which merely shows that the shelly substance was laid down in consecutive layers. The right or upper valve is thin and but slightly dished on the inside. Its outside shows the same layered shell deposition mentioned for the left valve. The interior of the valves shows the large muscle scar a little to the left of the median line. The left valve has a long heavy hinge with a slightly depressed narrow sublateral groove, and a broad or median impressed resilial area. The hinge is marked by transverse incremental lines. In the left

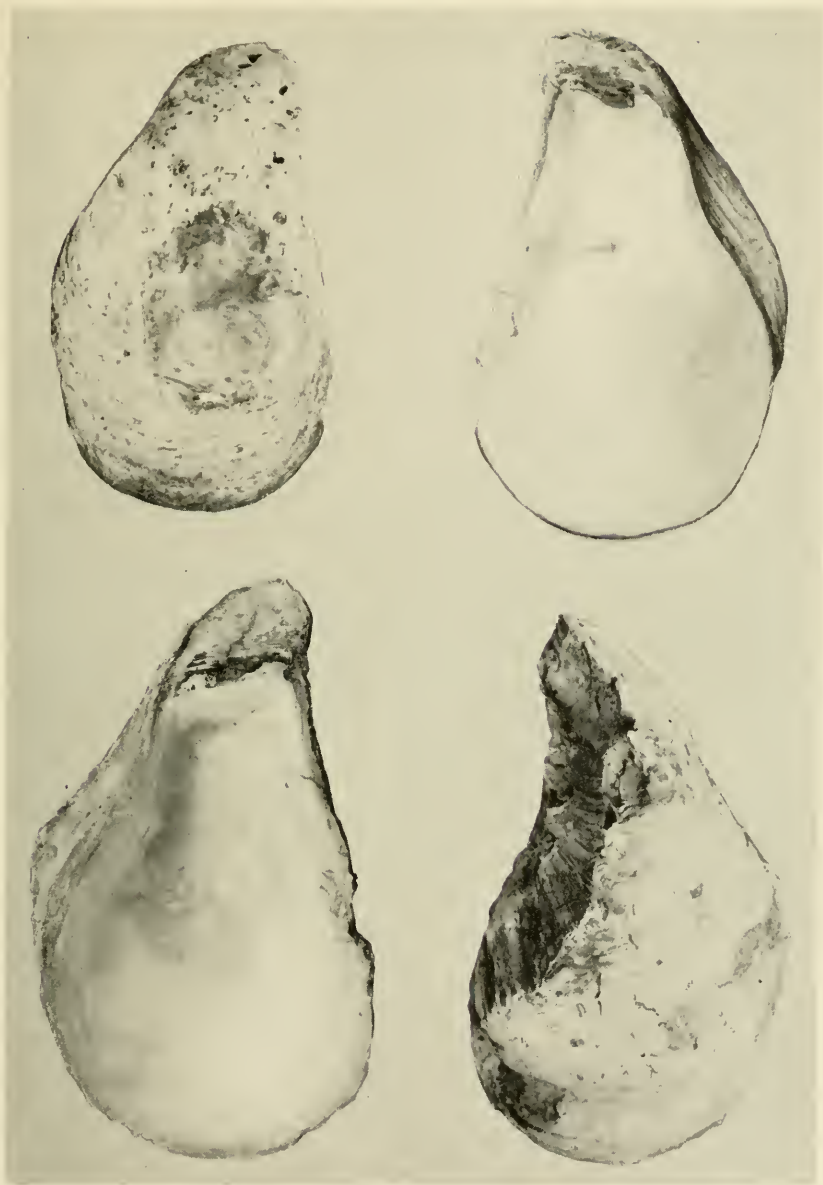
valve there is a shallow concavity under the posterior edge of the hinge caused here by partial overarchng of the hinge. The margin of the valve shows mere lines of growth, without indications of pits. In the right valve the hinge is much shorter. Both valves show dark periostracums in the hinge area. The right margin of the right valve is convex and slopes broadly and is marked by growth lines. Its right margin is concave; the reverse is true in the opposing valve.

The type, U.S.N.M. No. 254517, measures: Left valve, length, 187 mm.; diameter, 110 mm.; right valve, length, 167 mm.; diameter, 100 mm.

The left valves of the block of three specimens, U.S.N.M. No. 573610, figured in plate 2 measure, respectively: Length, 195 mm., 162 mm., 205 mm.; diameter, 90 mm., 108 mm., 100 mm.

Dr. H. M. Smith, while Fisheries Adviser in Siam, sent us six specimens collected at Koh Prap, U. S. N. M. No. 361064, and two, U. S. N. M. No. 361067, from Bandon Bight, Siam, which appear to belong to this species.

This species recalls *Ostrea gigas* Thunberg of Japan and northern China, but that is a much more elongate form and has a concentric lamellose exterior as well as dark coloration in the young stages.



**OSTREA BENEFICA, NEW SPECIES**

Type, U.S.N.M. No. 254517.

Upper, right valves; lower, left valves.



**OSTREA BENEFICA. NEW SPECIES**

Paratypes, U.S.N.M. No. 573610.  
Two views of a clump of three specimens.