Shell of the Month

by Dr. Rick Batt

Spondylus americanus Hermann, 1781 (Atlantic Thorny Oyster)

Thorny Oysters belong to the genus *Spondylus*, named for their ball-and-socket type of hinge. This genus includes numerous mainly tropical to subtropical species which usually have spines of some sort extending from the outer surface of the shell. In spite of the common name, they are actually more closely related to scallops, with small "ears" on either side of the beak or umbo. Like scallops, they have eyes along the edge of the mantle.

Thorny Oysters in general are sessile suspension feeders: they live on the bottom, often attached to some hard object by their right valve, and they filter food particles out of the water.

While a large number of species of Thorny Oyster can be found in the western Pacific, especially in the Philippines, only a few species inhabit the western Atlantic Ocean. The most spectacular of these is the Atlantic Thorny Oyster, and good quality specimens are highly sought after. It is found along the eastern coast of the United States from North Carolina southward, along both sides of Florida, and throughout the Gulf of Mexico and the Caribbean.

The Atlantic Thorny Oyster is an extremely variable species that is common in moderately deep water typically from ten to more than 70 meters in depth. It often attaches to rocks or rubble, but sometimes rests on sand with minimal attachment. Specimens are also often found attached to sunken shipwrecks and pilings of offshore oil platforms. On these specimens, the right valve often has a flat surface where it was attached.

Specimens of the Atlantic Thorny Oyster can be up to more than 150 mm (6 inches) across, and can exhibit a wide range of color, from white with variously tinted umbos to red, orange, pink, yellow, purplish, or a combination. In more exposed areas in the shallower part of its range, specimens often have numerous short, more needle-like or flattened spines. The photo below (on the following page) shows a few examples that were collected off of oil platform pilings or small patch reefs along Florida and Louisiana.



Specimens that grow in quieter water, including in caves and inside of shipwrecks, develop five or six rows of very long, thick spines, often with smaller sharper spines in between. The two photos below show a few examples from off Boynton Beach in eastern Florida.





In life, the spines are often host to a variety of sponges, bryozoans, and algae, providing great camouflage. An example of an uncleaned specimen is shown in the picture on the following page (also from off Boynton Beach).



Atlantic Thorny Oysters are a favorite food of the Giant Eastern Murex (*Hexaplex fulvescens*), and also used to be fished commercially off southern Florida.