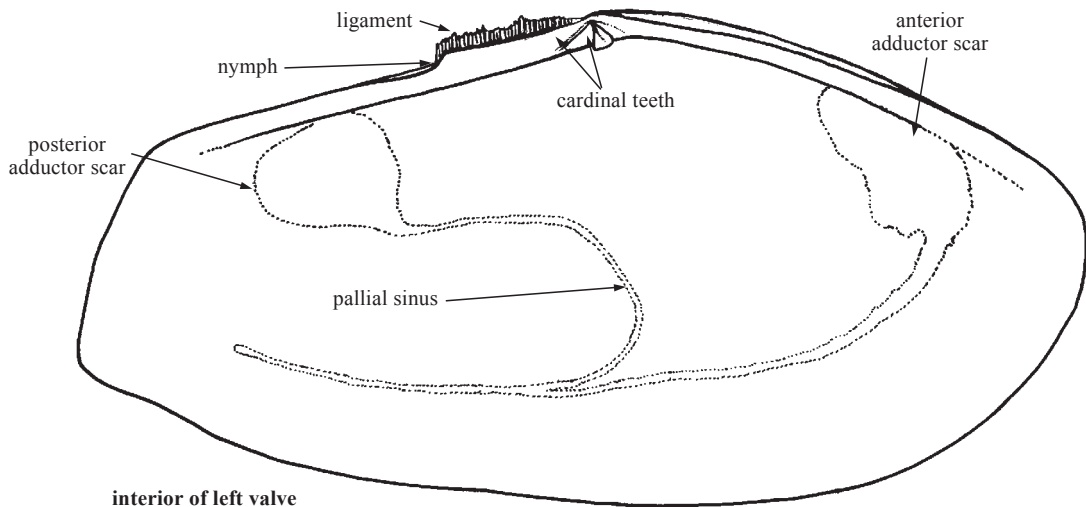


PSAMMOBIIDAE

Sunset clams, sanguins

Diagnostic characters: Shell oblong to oval, slightly gaping, sculpture mostly concentric, ligament external, strong, attached behind umbones on projecting narrow shelves. Hinge with 2 small cardinal teeth. Pallial sinus large.

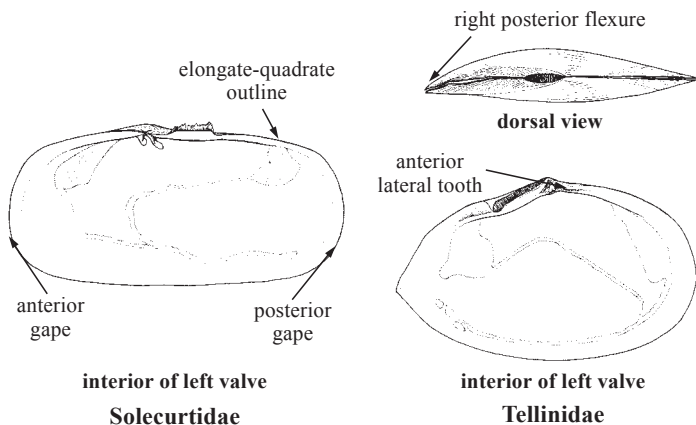


Habitat, biology, and fisheries: Subtidal in shallow water, in sand or sandy mud bottoms. Consumed locally and/or used as fish bait.

Similar families occurring in the area

Solecurtidae: shell elongate, gaping at both ends, umbones subcentral; ligament external, often on projecting shelves; hinge with 2 small cardinal teeth on each valve; siphons long, separate.

Tellinidae: shell compressed, oval to oblong, usually with flexed at posterior end; sculpture mostly lacking. Ligament external. Hinge with 2 cardinal teeth in each valve. Pallial sinus deep.



List of species of interest to fisheries occurring in the area

The symbol 🐚 is given when species accounts are included.

🐚 *Asaphis deflorata* (Linnaeus, 1758).

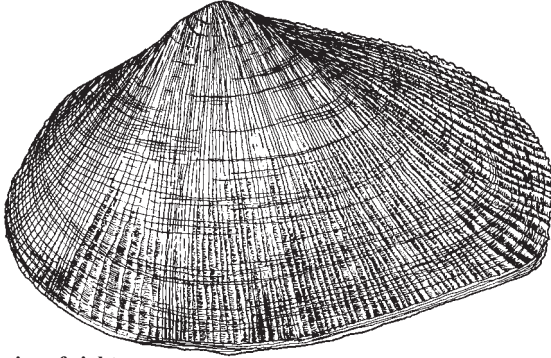
Reference

Berg, C. J. and P. Alatalo. 1985. Biology of the tropical bivalve *Asaphis deflorata* (Linné, 1758). *Bull. Mar. Sci.*, 37:827-838.

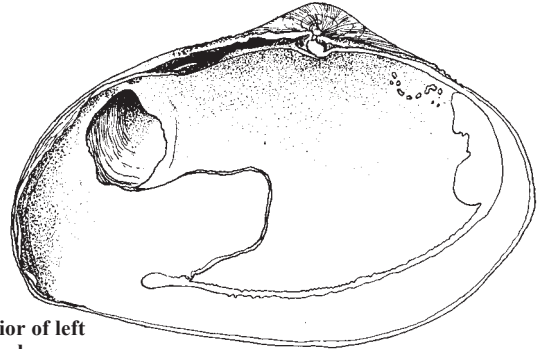
Asaphis deflorata (Linnaeus, 1758)

Frequent misidentifications: None / *Papyridea soleniformis* (Bruguère, 1789); *Sanguinolaria cruenta* (Lightfoot, 1786); *Semele purpurascens* (Gmelin, 1791).

FAO names: **En** - Gaudy asaphis (AFS: Gaudy sanguin); **Fr** - Sanguinoilaire ridée; **Sp** - Asafis arrugada.



exterior of right valve



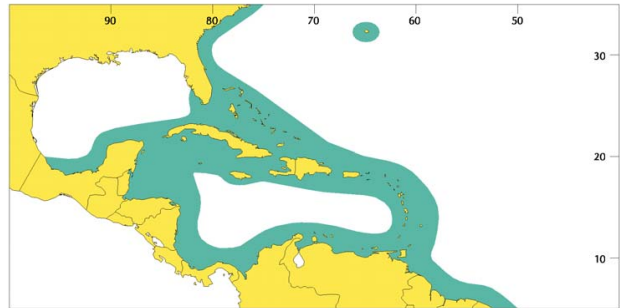
interior of left valve

Diagnostic characters: Shell moderately elongate, moderately inflated. Sculpture of numerous, coarse radial threads irregular in size. Pallial sinus large. Hinge with 2 cardinal teeth, lateral teeth absent. Umbones slightly coiled inward. **Colour:** variable (usually brighter internally), yellow, or stained with red, rose, or purple.

Size: To 78 mm.

Habitat, biology, and fisheries: In shallow water, sand or sandy mud bottoms. Hand collected, consumed locally or as bait. Darkly coloured visceral mass and gritty texture are apparent causes for restricted consumption (Berg and Alatalo, 1985).

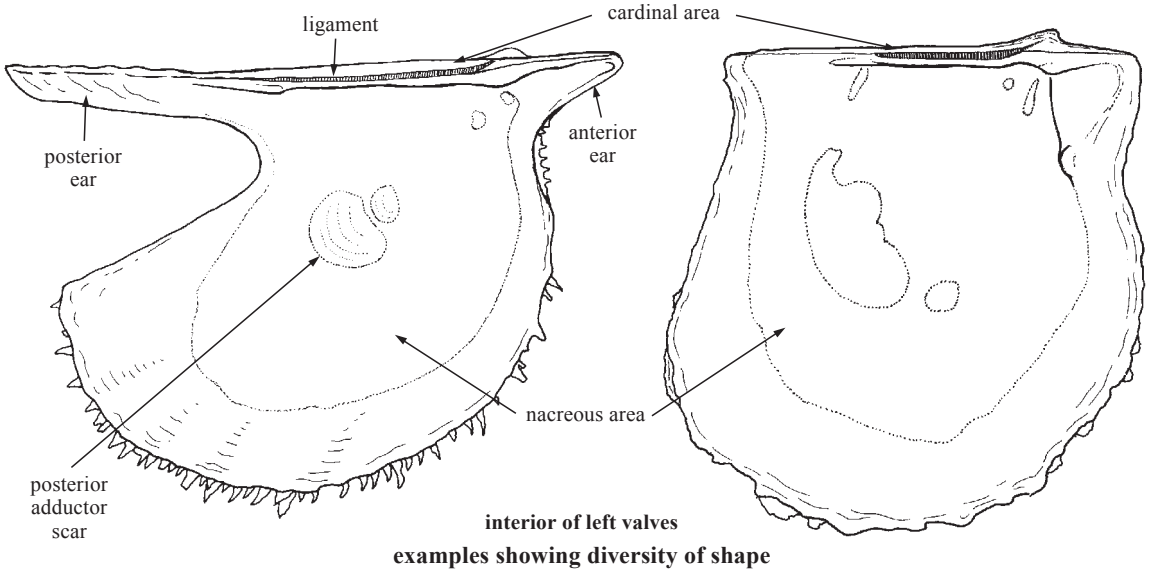
Distribution: Southeastern Florida, Caribbean to Brazil, and Bermuda.



PTERIIDAE

Pearl oysters

Diagnostic characters: Shell compressed, usually gaping, with concentric, often scaly, sculpture. Hinge lacking teeth, straight, projecting at both ends as wing-like expansions; posterior expansion usually longer. Ligament external, sunken. Anterior muscle scar very reduced or absent, posterior muscle scar large, central. Pallial sinus absent.

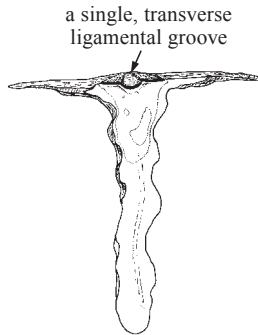


Habitat, biology, and fisheries: Lives attached by byssus to rocks or other hard substrates, in subtidal habitats between 1 to 20 m. Consumed locally raw or boiled. Traditionally exploited for the pearl market.

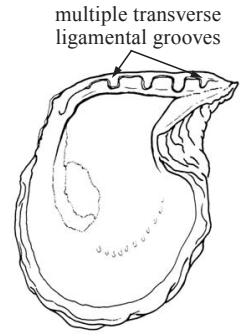
Similar families occurring in the area

Malleidae: cardinal area relatively wide, with a single transverse central groove for the ligament; shell often with a long, non-nacreous ventral to posteroventral expansion; dorsal margin of shell sometimes produced into very long wing-like expansions at both ends.

Isognomonidae: cardinal area with a series of transverse ligamental gooves.



Malleidae



Isognomonidae

List of species of interest to fisheries occurring in the area

The symbol 🐚 is given when species accounts are included.

- 🐚 *Pinctada imbricata* (Röding, 1798).

References

Leon, L., T. Cabrera, and L. Troccoli. 1987. *Fijación y índice de engorde de la ostra perla Pinctada imbricata, Roding 1798 (Mollusca: Bivalvia) en tres bancos naturales de nororiente de Venezuela*. Universidad de Oriente, Centro de Investigaciones Científicas, Contribuciones Científicas 12, 44 p.

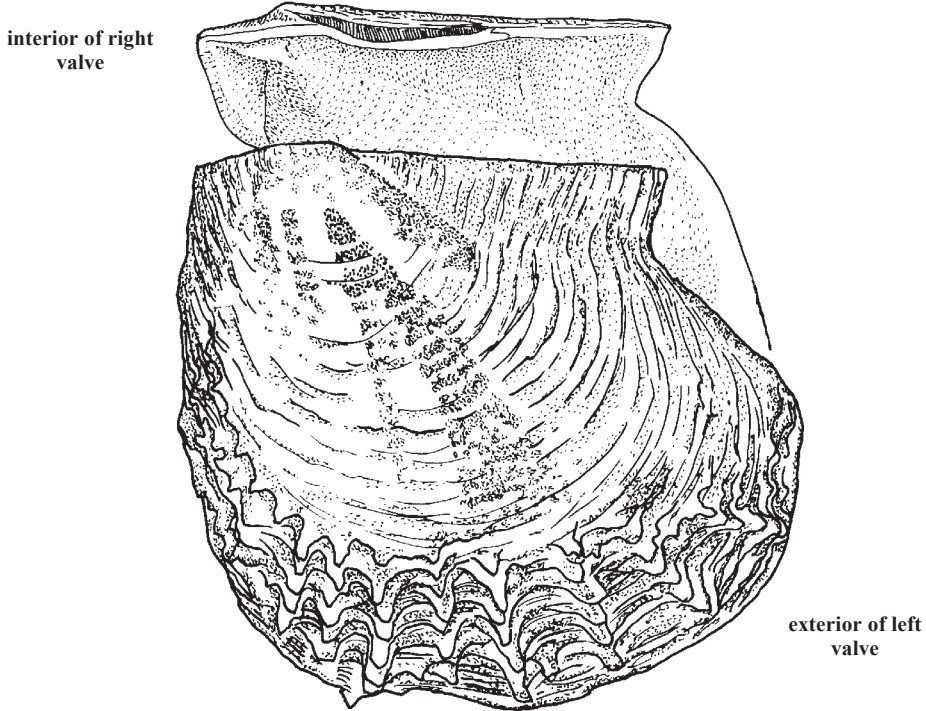
Romero, A., S. Chilbert, and M.G. Eisenhart. 1999. Cubagua's pearl-oyster beds: the first depletion of a natural resource caused by Europeans in the American continent. *J. Pol. Ecol.*, 6:57-78.

Pinctada imbricata (Röding, 1798)

IKI

Frequent synonyms / misidentifications: None / *Pteria colymbus* (Röding, 1798).

FAO names: **En** - Atlantic pearl oyster; **Fr** - Huître perlière de l'Atlantique; **Sp** - Ostra perlera Atlántica.

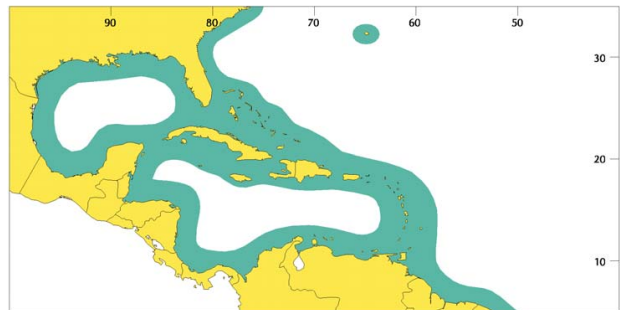


Diagnostic characters: Shell roundish, thin, flattened to moderately inflated, inequivalve. Hinge with 2 wing-like projections, posterior projection shorter than that of *Pteria colymbus*. Periostracum with flat, scale-like projections aligned concentrically. **Colour:** externally tan, brown, or purplish, with greenish cast, internally nacreous.

Size: To 76 mm.

Habitat, biology, and fisheries: Lives attached to rocks or other hard substrates, in shallow subtidal depths. Collected by free-diving by hand. Consumed locally, marinated or in stews. Historically exploited for the pearl market (Romero et al., 1999).

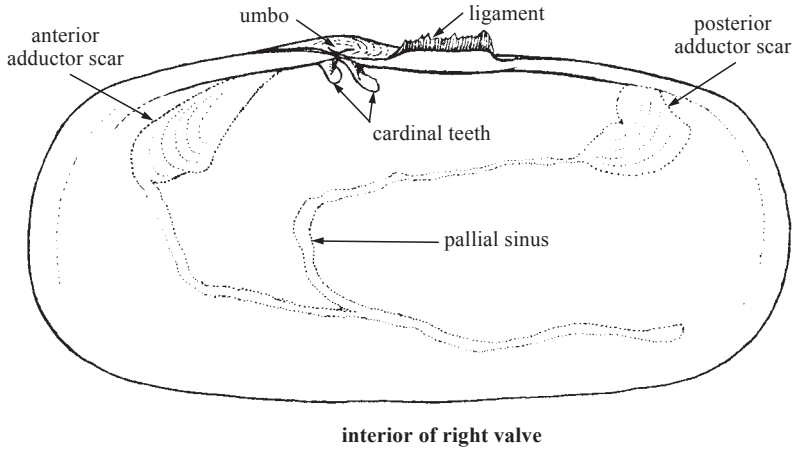
Distribution: South Carolina to Florida, Texas, and Caribbean to Brazil. Bermuda.



SOLECURTIDAE

Short razor clams

Diagnostic characters: Shell elongate, gaping at both ends, umbones subcentral. Ligament external, often on projecting shelves. Hinge with 2 small cardinal teeth on each valve. Siphons long, separate.

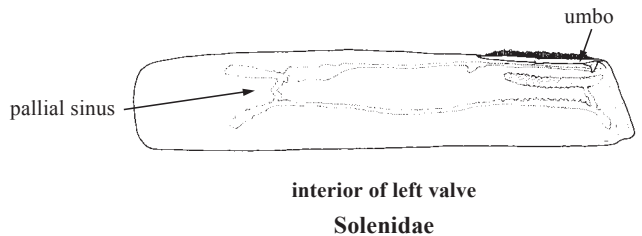
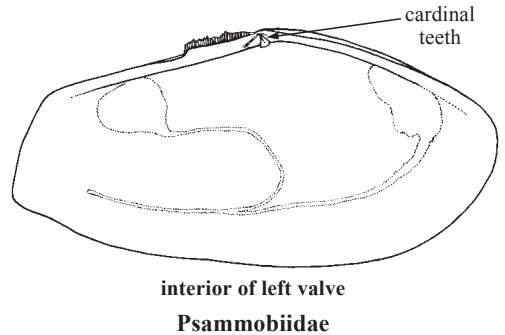


Habitat, biology, and fisheries: In mud in protected bays, from intertidal to shallow subtidal. Hand- or shovel collected, consumed locally in stews.

Similar families occurring in the area

Psammobiidae: shell inequilateral, ovate to subelliptical or trapezoidal in outline, less widely gaping and sometimes slightly flexed posteriorly.

Solenidae: shell narrowly elongate, very inequilateral; umbones near the anterodorsal end of valves; pallial sinus relatively shallow; siphons generally quite short, fused at their base.



List of species of interest to fisheries occurring in the area

The symbol 🐚 is given when species accounts are included.

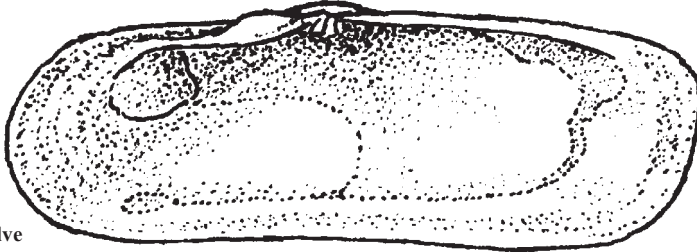
🐚 *Tagelus plebeius* (Lightfoot, 1786).

Tagelus plebeius (Lightfoot, 1786)

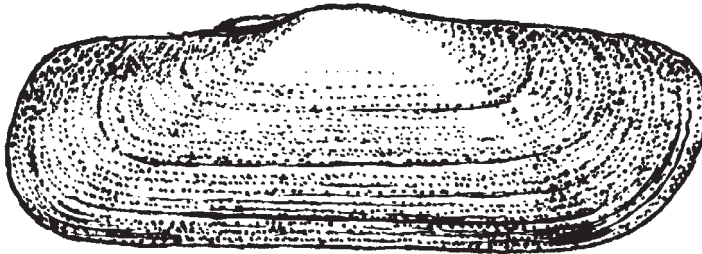
TEX

Frequent synonyms / misidentifications: None / *Tagelus divisus* (Spengler, 1794).

FAO names: En - Stout tagelus; Fr - Tagal corpulent; Sp - Tagelo plebeyo.



interior of right valve



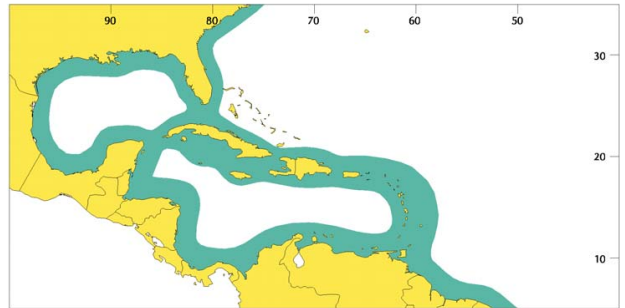
exterior of left valve

Diagnostic characters: Shell light, elongate, semi-cylindrical, inflated, posterior margin rounded, anterior margin straight but oblique. Weak radial ridge present posteriorly. Surface smooth except for fine concentric lines. Umbones slightly removed from centre of shell in posterior direction, indistinct. **Colour:** periostracum olive green to brownish yellow.

Size: To 80 mm.

Habitat, biology, and fisheries: Intertidal to shallow subtidal, in muddy sand or mud. Consumed locally stewed or grilled.

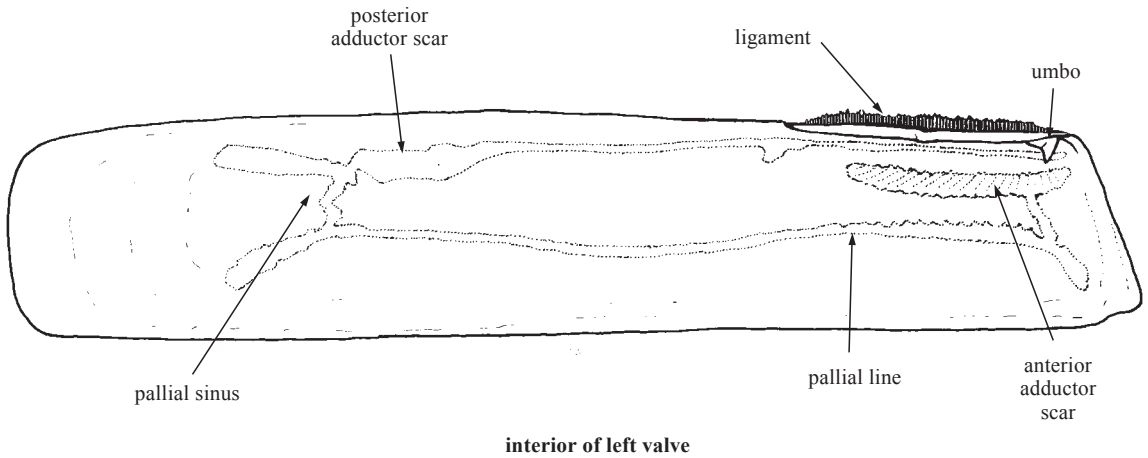
Distribution: Massachusetts to Florida, Texas, and Caribbean to Brazil.



SOLENIDAE

Knife and razor clams

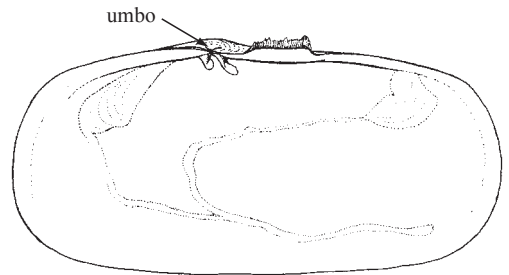
Diagnostic characters: Shell narrow, elongate, gaping at both ends. Umbones in anterior position. Anterior adductor muscle scar elongate, larger than posterior scar. Ligament external. Foot strong with an inflatable distal extremity.



Habitat, biology, and fisheries: In mud in protected bays, shallow subtidal. Hand or shovel collected, consumed locally in stews or fried.

Similar families occurring in the area

Solecurtidae: shell elongate, gaping at both ends, umbones subcentral; ligament external, often on projecting shelves; hinge with 2 small cardinal teeth on each valve; siphons long, separate.



List of species of interest to fisheries occurring in the area

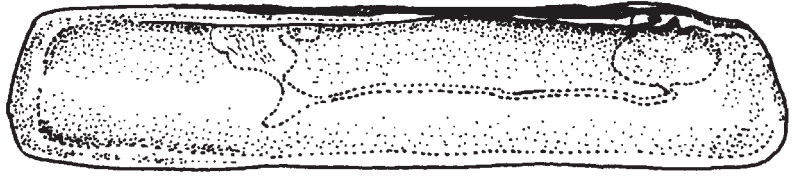
The symbol is given when species accounts are included.

Solen obliquus Spengler, 1794.

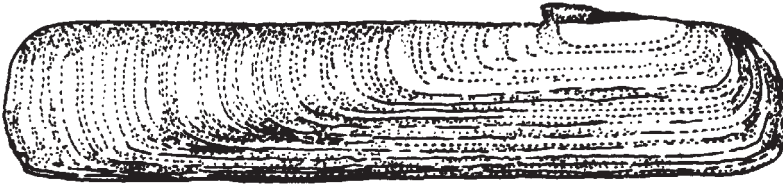
Solen obliquus Spengler, 1794

Frequent synonyms / misidentifications: None / *Solen rosewateri* Altena, 1971; *Solen tairona* Cosel, 1985.

FAO names: **En** - Antillean razor clam; **Fr** - Couteau antillais; **Sp** - Navaja antillana.



interior of left valve



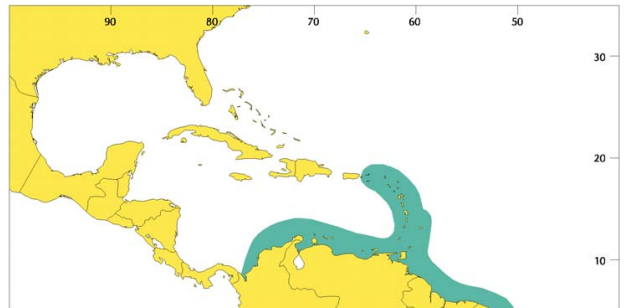
exterior of right valve

Diagnostic characters: Shell very elongate (ratio length: width 5:1), dorsal and ventral margins parallel, hinge posterior, with single pair of cardinal teeth. Shell thicker at anterior margin. Umbones at the angle formed by dorsal and posterior margins. **Colour:** brown to purple.

Size: To 96 mm.

Habitat, biology, and fisheries: Infaunal in muddy sand, in intertidal or shallow subtidal depths. Collected by hand, with shovels, or dredges. Consumed locally boiled, grilled, or fried.

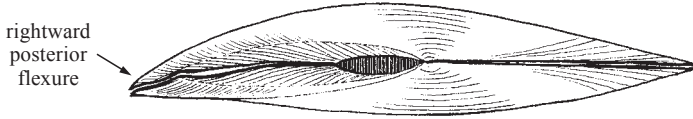
Distribution: Caribbean to Brazil.



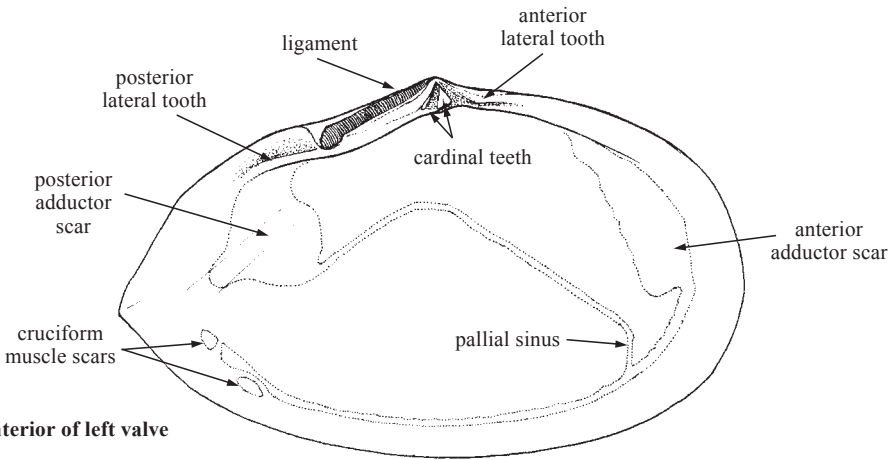
TELLINIDAE

Tellins

Diagnostic characters: Shell compressed, oval to oblong, usually with flexed at posterior end. Sculpture mostly lacking. Ligament external. Hinge with 2 cardinal teeth in each valve. Pallial sinus deep. **Colour:** shell usually brightly coloured.



dorsal view of entire shell



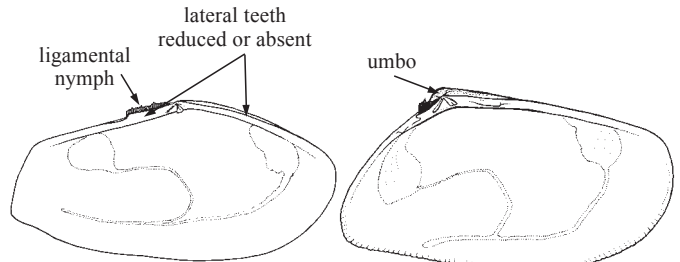
interior of left valve

Habitat, biology, and fisheries: Buried in sand, usually in high energy environments. Hand-collected, consumed locally.

Similar families occurring in the area

Psammobiidae: shell oblong to oval, slightly gaping, sculpture mostly concentric, ligament external, strong, attached behind umbones on projecting narrow shelves; hinge with 2 small cardinal teeth; pallial sinus large.

Donacidae: shell wedge-shaped, usually with an angled (keel-like) posterior surface; ligament external; hinge with 2 cardinal teeth on each valve; adductor muscle scars subequal.




interior of left valve

Psammobiidae

interior of left valve

Donacidae

List of species of interest to fisheries occurring in the area

The symbol  is given when species accounts are included.

 *Tellina fausta* Pulteney, 1799.

 *Tellina laevigata* Linnaeus, 1758.

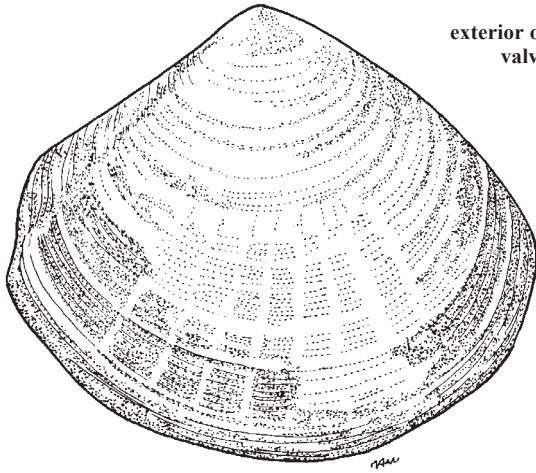
References

Boss, K.J. 1966. The subfamily Tellininae in the western Atlantic. The genus *Tellina* (part I). *Johnsonia*, 4(45):217-272.
 Boss, K.J. 1968. The subfamily Tellininae in the western Atlantic. The genera *Tellina* (part II) and *Tellidora*. *Johnsonia*, 4(46):273-344.

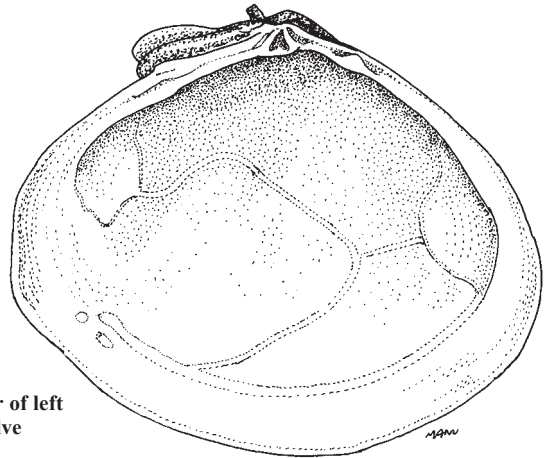
Tellina fausta Pulteney, 1799

Frequent synonyms / misidentifications: None / None.

FAO names: **En** - Faust tellin (AFS: Favored tellin); **Fr** - Telline fasute; **Sp** - Tellina lisa.



exterior of right
valve



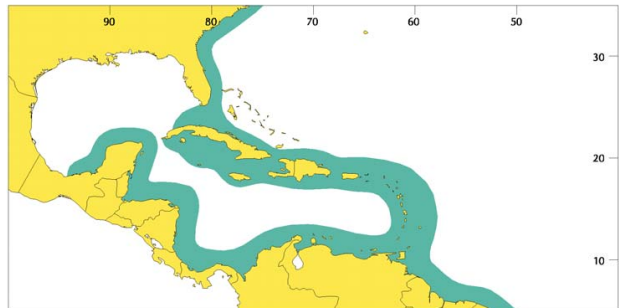
interior of left
valve

Diagnostic characters: Shell subcircular, heavy, inequivalve. Shell surface smooth except for fine, irregular growth lines. Hinge well developed, with posterior lateral tooth long and strong. Pallial sinus large, well developed. Umbones at central part of dorsal region. Oblique ridge runs from umbo to middle of posterior margin. Posterior shell margin sinuous in posterior view: posterior margin of right valve concave and of left valve concave. **Colour:** externally white, internally glossier white with yellow tinges.

Size: To 98 mm.

Habitat, biology, and fisheries: In shallow water, deeply burrowing in intertidal sand near seagrass beds. Consumed locally.

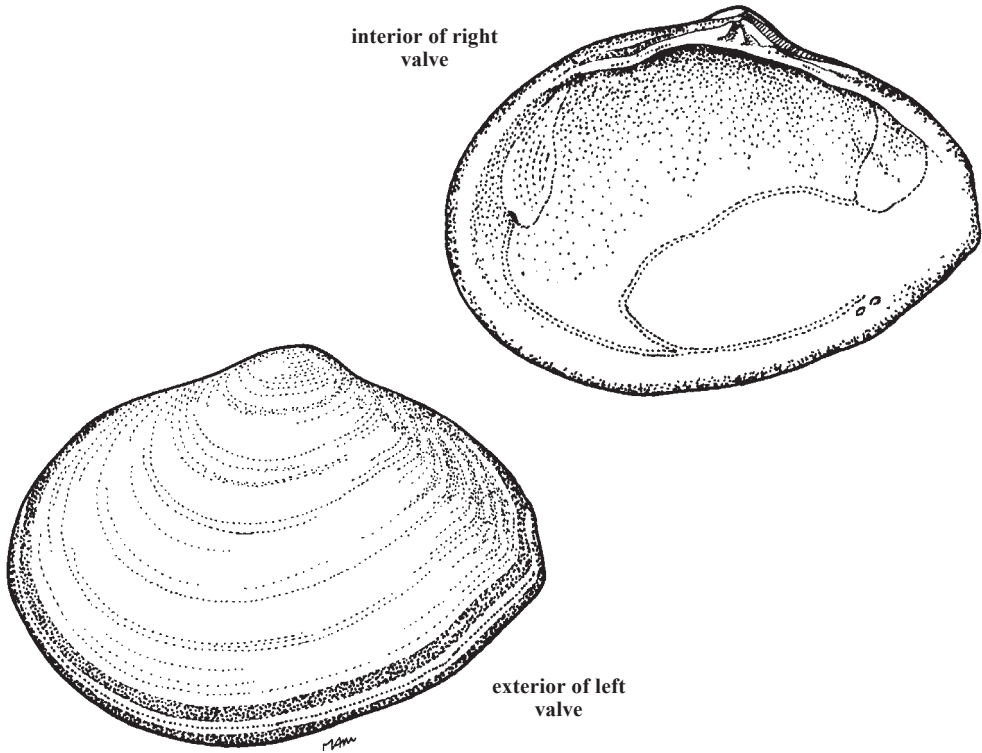
Distribution: North Carolina to southeastern Florida and Caribbean to Brazil.



Tellina laevigata Linnaeus, 1758

Frequent synonyms / misidentifications: None / None.

FAO names: **En** - Smooth tellin; **Fr** - Telline lisse; **Sp** - Telina lisa.

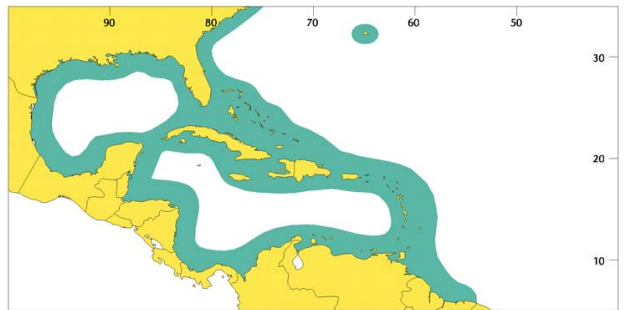


Diagnostic characters: Shell oval to slightly elongate, moderately compressed, strong. Surface smooth except for microscopic, irregular lines. Hinge with lateral and cardinal teeth present. **Colour:** externally whitish, rayed, or banded at ventral margins with light orange, internally white or with yellowish tinges.

Size: To 88 mm.

Habitat, biology, and fisheries: Sandy bottoms, in shallow water.

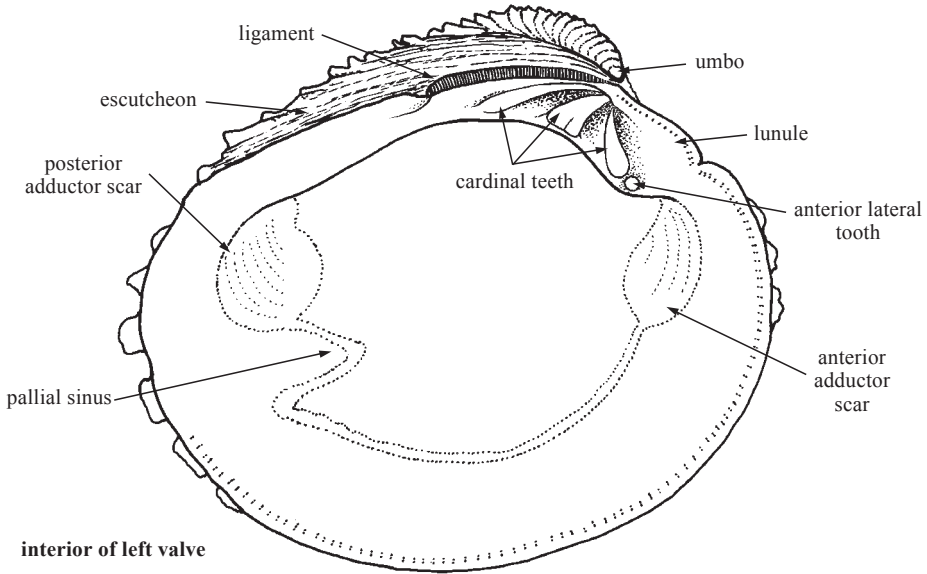
Distribution: North Carolina to southern Caribbean, and Bermuda.



VENERIDAE

Venus clams

Diagnostic characters: Shell usually solid, umbones anterior to midline, lunule and escutcheon usually present, sculpture usually concentric, sometimes lacking. Ligament external. Hinge with 3 or rarely 2 cardinal teeth in each valve. Adductor muscles (and their scars) usually equivalent in size.



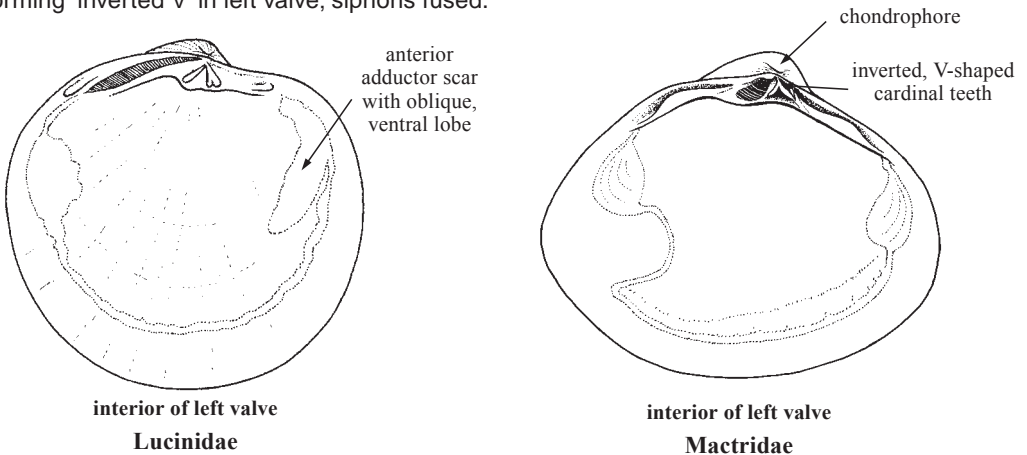
Habitat, biology, and fisheries: Species of interest to fisheries inhabit soft bottoms, usually in shallow subtidal environments. Some species, such as the southern quahog, represent a large fraction of local catches and efforts in aquaculture, particularly in the northern half of the area.

Remarks: Venus clams belong to the most specious family of marine bivalves. Due to a renewed interest in bivalve systematics, the taxonomy of the family is currently undergoing major rearrangements.


Similar families occurring in the area






Lucinidae: shell disk-shaped, ligament external, hinge typically with 2 cardinal and 2 lateral teeth; pallial sinus absent; foot long.

Mactridae: shell triangular to subtriangular, internal ligament, with chondrophore, typically with 2 fused cardinal teeth forming 'inverted V' in left valve; siphons fused.



List of species of interest to fisheries occurring in the area

The symbol  is given when species accounts are included.

-  *Chione cancellata* (Linnaeus, 1767).
-  *Macrocallista maculata* (Linnaeus, 1758).
-  *Macrocallista nimbosa* (Lightfoot, 1786).
-  *Mercenaria campechiensis* (Gmelin, 1791).
-  *Tivela mactroides* (Born, 1778).

References

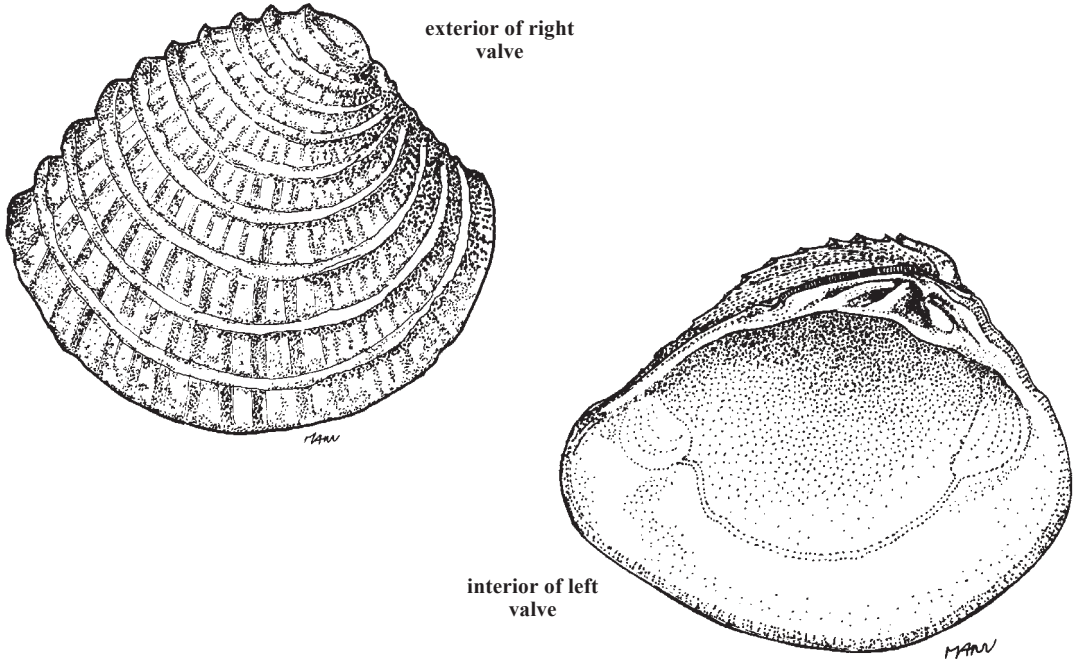
- Jolley, J.W., Jr. 1971. Exploratory fishing for the sunray venus, *Macrocallista nimbosa*, in northeastern Florida. *Fla. Dep. Nat. Res., Mar. Res. Lab., Tech. Ser.*, 67:42 p.
- Moore, H.B. and N.N. Lopez. 1969. The ecology of *Chione cancellata*. *Bull. Mar. Sci.*, 19(1):131-148.
- Prieto, A.S., C. Ramos, and D. Arrieche. 1998. Producción secundaria de una población de *Chione cancellata* de la costa sur del Golfo de Cariaco, Venezuela. *Rev. Biol. Trop.*, 46(4).
- Roopnarine, P. and G.J. Vermeij. 2000. One species becomes two: the case of *Chione cancellata*, the resurrected *Chione elevata*, and a phylogenetic analysis of *Chione*. *J. Moll. Stud.*, 66:517-534.

Chione cancellata (Linnaeus, 1767)

KNN

Frequent synonyms / misidentifications: None / *Chione elevata* (Say, 1822); juveniles of *Mercenaria campechiensis* (Gmelin, 1791).

FAO names: En - Cross-barred venus; Fr - Vénus quadrillée; Sp - Venus cuadrilla.



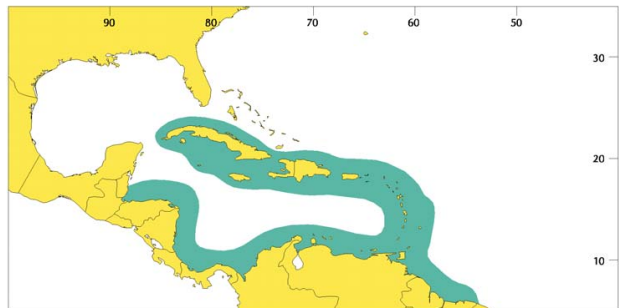
Diagnostic characters: Shell thick, trigonal. Sculpture of blade-like concentric ridges crossed by radial ribs. Interspaces between ribs smaller than between ridges. Lunule heart-shaped, dark. **Colour:** externally white to light grey, sometimes with brown rays, internally white, frequently with blue-purple markings.

Size: To 45 mm.

Habitat, biology, and fisheries: Sand in shallow subtidal environments, often in seagrass beds. Consumed locally in chowders or soups.

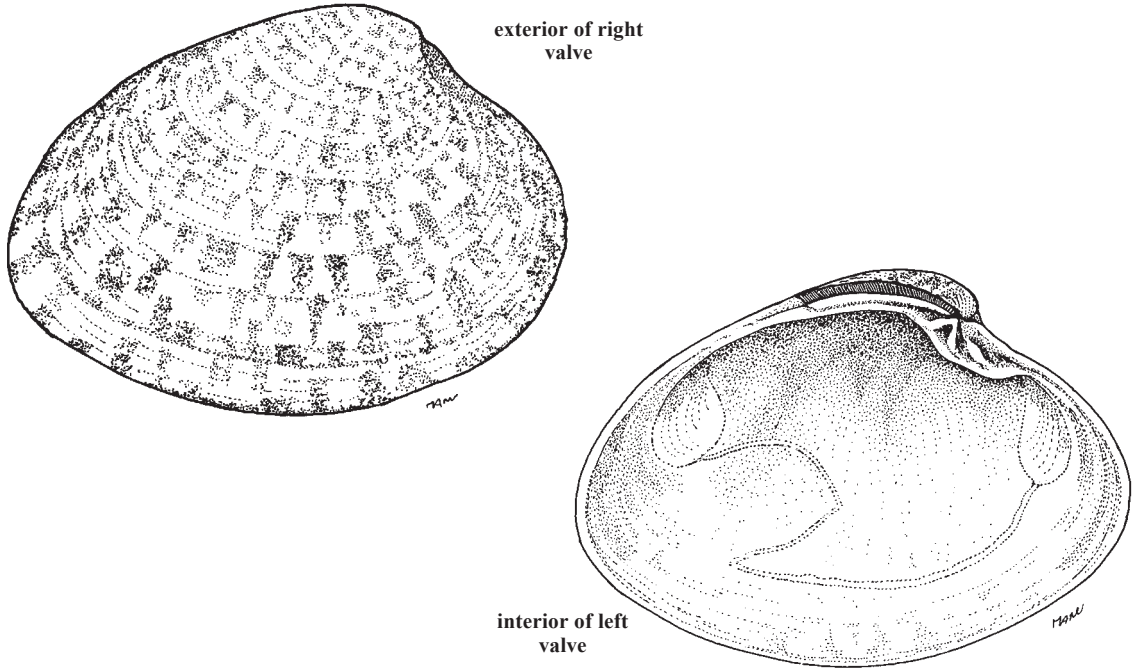
Distribution: Caribbean and from Honduras to southeastern Brazil.

Remarks: Populations formerly attributed to this species in northern sector of area (from Belize and Mexican Caribbean northward) have been shown by Roopnarine and Vermeij (2000) to belong to a separate species, *Chione elevata* (Say, 1822).



Macrocallista maculata (Linnaeus, 1758)

KSM

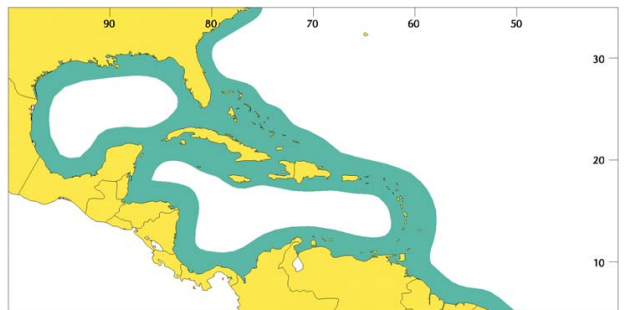
Frequent synonyms / misidentifications: None / *Macrocallista nimbosa* (Lightfoot, 1786)**FAO names:** En - Calico clam; Fr - Vénus calicot; Sp - Almeja calico.

Diagnostic characters: Shell ovate, much less elongate than *Macrocallista nimbosa*. Surface highly glossy. Sculpture of very fine growth lines under glossy layer. Umbones small. Lunule small. **Colour:** tan with irregular brown marks, sometimes arranged in radial bands. Internally white.

Size: To 70 mm.

Habitat, biology, and fisheries: Lives in coarse sand, often near seagrass beds, in shallow subtidal depths. Consumed locally in southern half of area in chowders and stews.

Distribution: North Carolina to Florida, Texas, Caribbean to Brazil, and Bermuda.

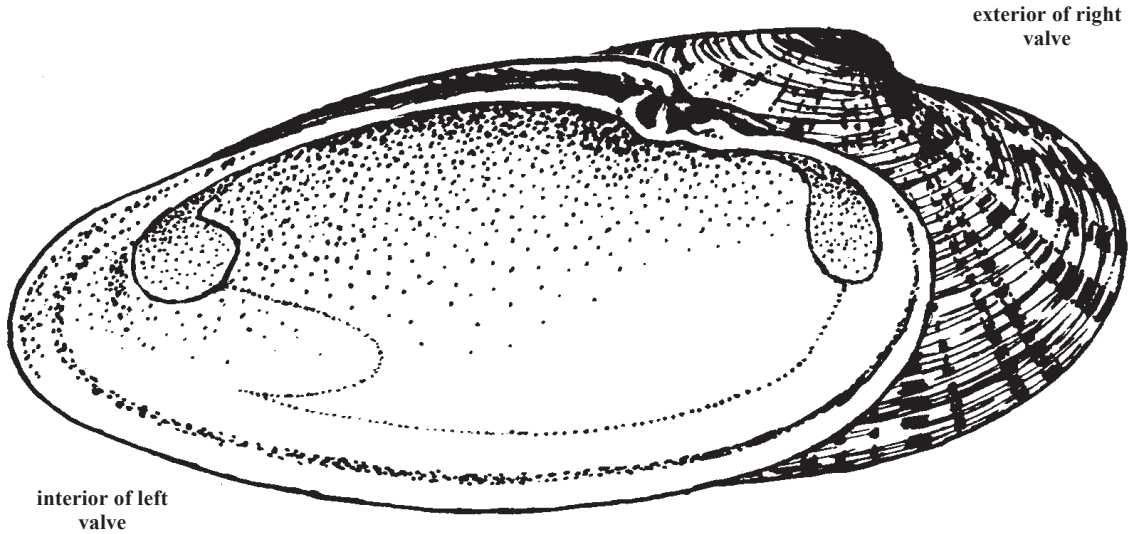


Macrocallista nimbosa (Lightfoot, 1786)

KSN

Frequent synonyms / misidentifications: None / *Macrocallista maculata* (Linnaeus, 1758).

FAO names: **En** - Sunray venus; **Fr** - Vénus rayon de soleil; **Sp** - Venus rayo de sol.

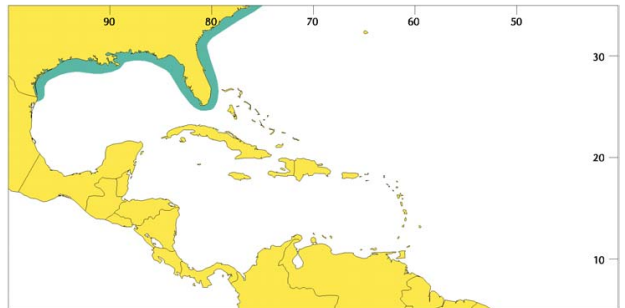


Diagnostic characters: Shell elongate, ovate. Surface glossy. Sculpture almost completely absent, except for weak growth lines and radial riblets. Lunule oval. Long external ligament. **Colour:** salmon to greyish purple, with darker, brownish radial bands; lunule purplish.

Size: To 150 mm.

Habitat, biology, and fisheries: Lives in sandy bottoms. Commercial production ceased in Florida in 1973. Consumed locally in chowders.

Distribution: North Carolina through Florida to Texas.

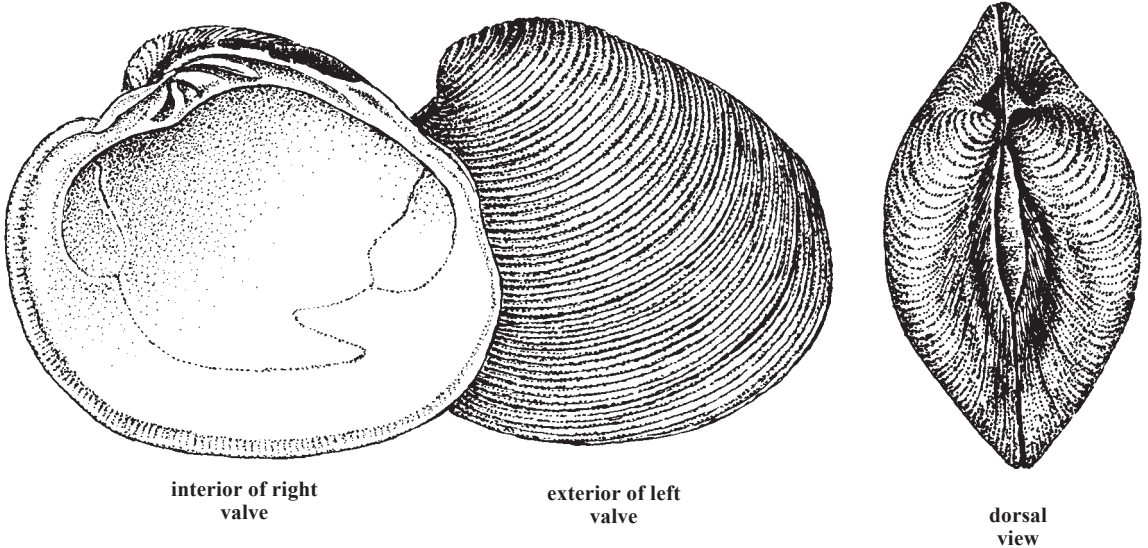


Mercenaria campechiensis (Gmelin, 1791)

EKK

Frequent synonyms / misidentifications: None / *Mercenaria mercenaria* (Linnaeus, 1758).

FAO names: **En** - Southern hardshell clam (AFS: Southern quahog); **Fr** - Praire du sud; **Sp** - Almeja del sur.



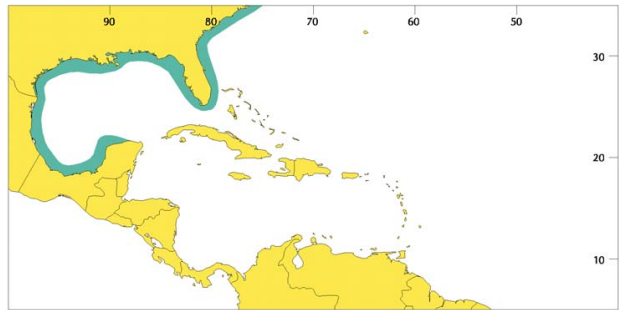
Diagnostic characters: Shell thick, more inflated than in *Mercenaria mercenaria*, ovate-trigonal. Sculpture of irregular lines, more separated than in *M. mercenaria*. Lines never absent in middle of valve. Lunule as long as wide. **Colour:** dull white to grey. Internally sometimes stained with purple.

Size: To 150 mm.

Habitat, biology, and fisheries: Lives from the intertidal to the shallow subtidal (to about 16 m depth), in moderately hard sandy bottoms or in sandy mud. Sometimes in close association with seagrass beds and algae. Rarely found in the surf zone. One of the most commercially exploited bivalve species in the area. Species is harvested by digging in shallow water. Also collected by recreational fishermen by 'treading' (probing with bare feet), and in deeper water by bull rakes and clam tongs. Mechanical harvesting not permitted in Florida. Species is high in protein and virtually fat-free. Consumed in chowders, with pasta, on the half-shell, or in a variety of dishes.

Distribution: Southern New Jersey to Florida to Texas and Yucatán, Mexico, and northern Cuba.

Remarks: This species may form hybrids with individuals of *M. mercenaria* in the southeastern USA.

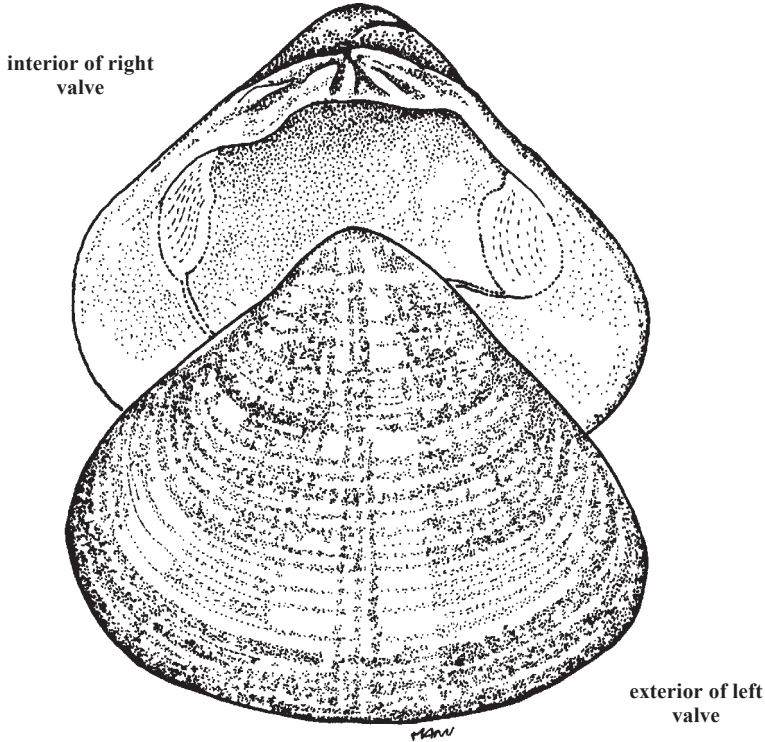


Tivela mactroides (Born, 1778)

TVM

Frequent synonyms / misidentifications: None / *Polymesoda arctata* (Deshayes, 1854); *Polymesoda aequilatera* (Deshayes, 1855).

FAO names: En - Trigonal tivala; Fr - Tivèle trigone; Sp - Tivela triangular.



Diagnostic characters: Shell heavy, thick, inflated, triangular. Shell surface umbones central and prominent. Hinge with 3 cardinal teeth, with smaller secondary teeth present. Lateral tooth in left valve large. Lunula large, escutcheon absent. Periostracum like varnish. **Colour:** whitish with brown tinges and rays.

Size: To 38 mm.

Habitat, biology, and fisheries: Lives in sand, from the intertidal to very shallow subtidal. Consumed locally in soups, stews, or on the half-shell.

Distribution: Caribbean to Brazil.

