New Caribbean Molluscan Faunas

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A CERF Book
this new species.

Discussion: *Conus aureonimbosus* is closest to *C. amphiurgus* Dall (= *C. juliae* Clench) from the Gulf of Mexico and Carolinian Province, but differs in being a much smaller, more elongated and slender shell, by having a coronated spire, and by having a protracted, mammilate protoconch. By having an obsoletely coronated spire, *C. aureonimbosus* may actually be closer to the *C. cardinalis* complex from the Caribbean. If this is the case, then *C. aureonimbosus* represents the deepest-dwelling member of that normally reef-dwelling species group. The brilliant yellow patches on this new species certainly sets it apart from all other western Atlantic cone shells. *Conus aureonimbosus* and *C. amphiurgus* are compared on Plate 4.

**Family Terebridae**

*Genus Terebra* Bruguère, 1789

*Subgenus Myurella* Hinds, 1845

*Terebra (Myurella) lindae* new species (Plate 2, Figures 11, 12)

Material Examined: **HOLOTYPE** - Length 63 mm, width 10 mm, dredged from 150 m depth, 50 km south of Apalachicola, Florida, 1982, USNM 859807; **PARATYPES** - length 68 mm (tip broken), same depth, locality, and date as holotype, Gene Everson collection; length 65 mm, same locality, Petuch collection.

Description: Shell very elongated, slender; suture bordered by row of very large, rounded beads; row of smaller beads below (anterior to) row of large beads; rest of whorl smooth, shiny; color orange-tan with two rows of larger, reddish-brown spots on each whorl, one row along suture, often between subsutural beads; columella and siphonal canal bright yellow; interior of aperture orange-tan.

Etymology: Named for my wife, Linda J. Petuch.

Discussion: *Terebra lindae* is closest to the widespread *Terebra floridana* Dall, which ranges from South Carolina to Brazil. The new Florida species differs from its widespread Caribbean relative by being a much more elongated and slender species and by having larger subsutural beads. The most obvious difference between the two species is seen in the color; *T. floridana* is a uniformly unicolored yellow or yellowish-white shell without any spots, while *T. lindae* is a bright orange-tan shell with two rows of large, dark brown or reddish-brown spots and patches. By having a spotted shell, *T. lindae* somewhat resembles a pale, very slender *T. taurina* Lightfoot. *Terebra lindae* is also a much smoother shell than *T. floridana*, virtually lacking any sculpturing below the subsutural beads.

**Family Turridae**

*Subfamily Clavinæae*  

*Genus Splendrillia* Hedley, 1922

**Splendrillia sunderlandi** new species (Plate 2, Figures 9, 10)

Material Examined: **HOLOTYPE** - Length 40 mm, width 14 mm, dredged from 150 m depth, 50 km south of Apalachicola, Florida, 1982, USNM 859800; **PARATYPE** - Length 20 mm (juvenile), Kevan Sunderland collection.

Description: Shell large for genus, elongated; body whorl and spire whorls rounded, without obvious shoulder; shell smooth, silky, without spiral grooves, threads, or other sculpture; body whorl with large, wide, swollen axial hump that is roughly 3 ribs in width; columella wide, well-developed; shell color pure white with single, wide, wine red band around mid-body; spire whorls with red band running along suture; interior of aperture white, with red band showing through
PLATE 2. NEW GASTROPODS FROM THE TAMPAN SECONDARY RELICT POCKET

Figures 1, 2: *Heilprinia lindae* Petuch, n.sp., dorsal and ventral views of holotype, 143 mm.

Figures 3, 4: *Muricantharus harasewychi* Petuch, n.sp., dorsal and ventral views of holotype, 25 mm.

Figures 5, 6: *Cancellaria richardpetiti* Petuch, n.sp., dorsal and ventral views of holotype, 31 mm.

Figures 7, 8: *Conus aureonimbus* Petuch, n.sp., dorsal and ventral views of holotype, 27 mm.

Figures 9, 10: *Splendrittia sunderlandi* Petuch, n.sp., dorsal and ventral views of holotype, 40 mm.

Figures 11, 12: *Terebra (Myuretla) lindae* Petuch, n.sp., dorsal and ventral views of holotype, 63 mm.
PLATE 6. GASTROPODS FROM THE SOUTHEASTERN UNITED STATES, BERMUDA, COZUMEL, AND FLORIDA STRAITS

Figures 1, 2: *Cypraea aubryana* Jousseaume, 1869, dorsal and ventral views of 49 mm specimen, St. Vincent Island, Lesser Antilles. Taken from Sowerby (1880). Apertural dentition apparently enhanced in this illustration.

Figures 3, 4: *Cypraea aubryana* Jousseaume, 1869 dorsal and ventral views of 45 mm specimen, off Cozumel Island, Mexico.

Figures 5, 6: *Latirus maccurreyi* Clench and Aguayo, 1941, dorsal and ventral views of holotype, 55 mm, Cuba and Straits of Florida.

Figures 7, 8: *Conus lightbourni* Petuch, 1986, dorsal and ventral views of 47 mm specimen, 180 fathoms, off Bermuda.

Figure 9: *Conus lightbourni* Petuch, 1986, dorsal view of holotype, 35 mm, 180 fathoms off Bermuda.

Figures 10, 11: *Conus flamingo* Petuch, 1980, dorsal and ventral view of holotype, 19 mm, Dania, Florida.

Figure 12: *Conus flamingo* Petuch, 1980, dorsal view of paratype, 18 mm, Dania, Florida.

Figures 13, 14: *Polystira sunderlandi* Petuch, n.sp., dorsal and ventral views of holotype, 28 mm.

Figures 15, 16: *Terebra (Striateraibrum) onslowensis* (Petuch, 1974), dorsal and ventral views of holotype, 45 mm, Onslow Bay, North Carolina.
rough-textured shell, *C. pacei* is closest to *C. macgintyi* Pilsbry, but differs in being a much smaller, stockier shell, by lacking the beaded shoulder and spire whorls, and by being a pure white shell instead of having bands of large brown spots and brown spire flammules. In shape and size, *C. pacei* comes closest to *C. rainseae* McGinty from off Yucatan, Mexico, but differs in having a strongly sculptured body whorl and by lacking a color pattern. From the southern Caribbean *C. mazi* Deshayes, *C. pacei* differs in being a smaller, stockier shell, by having a much higher spire, by having a sculptured body whorl, and by lacking a spotted color pattern.

In many ways, particularly in size, proportions, and sculpturing, *C. pacei* resembles a pale *C. insculptus* Kiener from deep water in the Melanesian-Philippines region. This new deep water Bahaman species also resembles the Caribbean Pliocene fossil species *C. gracilissimus* Guppy, but differs in lacking the row of beads along the shoulder. *Conus gracilissimus* may be the direct ancestor of *C. pacei*. *Conus rainseae*, *C. pacei*, *C. mazi*, and *C. macgintyi* are shown together on Plate 7 for easy comparison.

**Family Terebridae**

**Genus Terebra** Bruguière, 1789

**Subgenus Strioterebrum** Sacco, 1891

*Terebra (Strioterebrum) biminiensis* new species (Plate 9, Figures 15, 16)

**Material Examined:** HOLOTYPE - Length 33 mm, width 7 mm, on sand bottom 1 m depth, Nixon’s Harbour, South Bimini Island, Bimini Chain, Bahamas, 1975, USNM 859893; PARATYPE - length 22 mm, on beach, Nixon’s Harbour, South Bimini Island, Robert Pace collection.

**Description:** Shell slender, elongated, with straight-sided whorls; whorls with 21-25 narrow, rounded axial ribs; ribs slightly curved, being bent toward aperture near suture, and straight on main body of whorl; deeply impressed sulcus below suture, producing wide subsutural band; subsutural band intersected by axial ribs, producing beaded effect; body whorl, subsutural band, and spire whorls covered by numerous, fine, raised spiral threads; aperture long and narrow, produced antero-ward; shell color uniform pale pinkish tan; interior of aperture rose-pink with tan overtones.

**Etymology:** Named for the Bimini Chain of islands, the Bahamas, the type locality.

**Discussion:** *Terebra biminiensis* is the newest member of the *T. protea* Conrad species complex, which includes several similar-appearing, small species that are distributed throughout the western Atlantic. *Terebra biminiensis* is closest to *T. protea*, but differs in being a much larger, more elongated shell, in having a better-developed and more pronounced subsutural band, in having more axial ribs, in having more sloping last whorl and more elongated aperture, and in being a pale pinkish-tan color instead of dark tan or brownish-purple. *Terebra biminiensis* appears to be the largest species in the *T. protea* complex, and with its prominent subsutural band, bears resemblance to a slender *T. dislocata* Say. To date, *T. biminiensis* has only been found in the Bimini Chain of islands, but may possibly be found at other localities in the Bahamas.

*Terebra (Strioterebrum) pacei* new species (Plate 9, Figures 17, 18)

**Material Examined:** HOLOTYPE - Length 24 mm, width 5 mm, in sand, 1 m depth, Nixon’s Harbour, South Bimini Island, Bimini Chain, Bahamas, 1975, USNM 859894; PARATYPE - Length 22 mm, on beach, Nixon’s Harbour, South Bimini Island, Robert Pace collection.

**Description:** Shell elongated, with distinctly concave whorls; last whorl elongated, with rounded and tapered base; aperture elongated; whorls ornamented with 21-24 large, evenly-spaced axial
ribs; subsutural band well-developed, projecting beyond outline of shell, producing concave appearance to whorls; axial ribs extend onto subsutural band, producing evenly-spaced, oval-shaped beads; axial ribs overlaid with numerous large, raised spiral threads; subsutural beads smooth, without threads; shell color pale lilac purple with scattered, large reddish-brown axial flames; base of shell darker purple; columella and siphonal canal brown; protoconch and early whorls dark purple-brown; interior of aperture white.

Etymology: Named for Mr. Robert Pace of Miami, Florida, in recognition of his extensive exploratory collecting in the Bimini area.

Discussion: *Terebra pacei* is a distinctive little species, combining the features of several small *Terebra* species from the Caribbean region. *Terebra pacei* is closest to *T. concava* Say from the North American mainland, but differs in being a larger, more slender shell with a much more elongated aperture, in having prominent axial ribs, in having a much more elongated last whorl with a rounded base instead of an angled one, and in having prominent spiral threads superimposed on top of the axial ribs. The color patterns also differ greatly; *T. pacei* is a lilac-colored shell with scattered orange-tan axial flames and dark purple early whorls and base, while *T. concava* is uniformly pale yellow or gray.

*Terebra pacei* may be endemic to the Bahamas, although similar-appearing, large specimens have recently been dredged from 200 ft. depths off Palm Beach. Further study may show them to be conspecific.
PLATE 9. NEW GASTROPODS FROM THE BAHAMAS AND COZUMEL ISLAND

Figures 1, 2: *Trivia (Niveria) pacei* Petuch, n.sp., dorsal and ventral views of holotype, 12 mm.

Figures 3, 4: *Muricopsis sunderlandi* Petuch, n.sp., dorsal and ventral views of holotype, 13 mm.

Figure 5: *Muricopsis sunderlandi* Petuch, n.sp., dorsal view of paratype.

Figure 6: *Conus sphaelatus* Sowerby, 1833, ventral view of 17 mm specimen, Grand Cayman Island, for comparison with *Conus kirkandersi* Petuch.

Figures 7, 8: *Conus leekremeri* Petuch, n.sp., dorsal and ventral views of holotype, 30 mm.

Figures 9, 10: *Conus lindae* Petuch, n.sp., dorsal and ventral views of holotype, 31 mm.

Figures 11, 12: *Conus pacri* Petuch, n.sp., dorsal and ventral views of holotype, 19 mm.

Figures 13, 14: *Conus kirkandersi* Petuch, n.sp., dorsal and ventral views of holotype, 15 mm.

Figures 15, 16: *Terebra (Strioterebrum) biminiensis* Petuch, n.sp., dorsal and ventral views of holotype, 33 mm.

Figures 17, 18: *Terebra (Strioterebrum) pacei* Petuch, n.sp., dorsal and ventral views of holotype, 24 mm.
PLATE 20. CHARACTERISTIC GASTROPODS FROM NORTHERN COLOMBIA AND VENEZUELA

Figures 1, 2: *Cypraea* (*Siphocypraea*) donnoorei (Petch, 1979), dorsal and ventral views of 58 mm specimen, Gulf of Venezuela.

Figure 3: *Siratus thompsoni* (Bullis, 1964), ventral view of holotype.

Figures 4, 5: *Panamurex recticanalis* (Weisbord, 1962), dorsal and ventral views of 18 mm specimen, Gulf of Venezuela.

Figure 6: *Fasciolaria tulipa hollisteri* Weisbord, 1962, dorsal view of 105 mm specimen, Gulf of Venezuela.

Figure 7: *Voluta musica guinaica* Lamarck, 1811, ventral view of 60 mm specimen, Amuay Bay, Gulf of Venezuela.

Figure 8: *Conus granarius* Kiener, 1845, dorsal view of 33 mm specimen, Goajira Peninsula, Colombia.

Figure 9: *Clathodrilla gibbosa* (Born, 1778), ventral view of 45 mm specimen, Gulf of Venezuela.

Figure 10: *Conus sanguineus* Kiener, 1845, ventral view of 23 mm specimen, off Los Taques, Gulf of Venezuela. Shell smooth with blood-red markings.

Figure 11: *Terebra petiveriana* Deshayes, 1857, dorsal view of 33 mm specimen, Cartagena, Colombia.

Figure 12: *Olitca tisiphona* form oblonga Marrat, 1870, 52 mm specimen, 3 m depth off Santa Marta, Colombia.

Figure 13: *Conus cf. granarius* Kiener, 1845, 26 mm specimen, 35 m depth off Golfo de Uraba, Colombia.

Figure 14: *Conus mappa caracanus* Hwass, 1792, 65 mm specimen, 35 m depth in Golfo de Triste, Venezuela.

Figure 15: *Strombina caboblauquensis* Weisbord, 1962, 20 mm specimen from 35 m depth, Gulf of Venezuela.

Figure 16: *Strombina pumilio* (Reeve, 1859), 16 mm specimen, on beach, Riohacha, Goajira Peninsula, Colombia.

Figure 17: *Fusitunicula iole* Woodring, 1928, 17 mm specimen, 35 m depth off Golfo de Triste, Venezuela.

Figure 18: *Strioretrebra trispinalis* (Weisbord, 1962), 14 mm specimen, Adicora, Paraguana Peninsula, Venezuela.

Figure 19: *Strioretrebra quadrispiralis* (Weisbord, 1962), 13 mm specimen, Adicora, Paraguana Peninsula, Venezuela.