



Gulf of Mexico

Origin, Waters, and Biota

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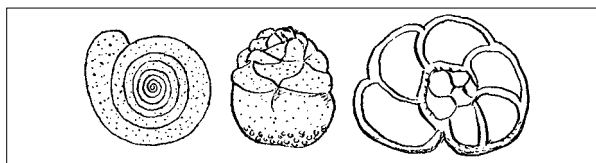
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Foraminifera of the Gulf of Mexico

Barun K. Sen Gupta, Lorene E. Smith, and María Luisa Machain-Castillo

Shelled protists of the Class Foraminifera (Phylum Granuloreticulosa) living in the Gulf of Mexico (GMx) have been studied since the 1890s (see Cushman 1918), but when Fred Phleger and Frances Parker wrote their chapter for Fisheries Bulletin 89 (Phleger and Parker 1954), much of the information came from their own extensive work. Their table of benthic taxa (reproduced from Phleger 1951) contained 113 named species and varieties, 4 species with uncertain trivial names, and 6 species with only generic names. In addition, they gave a list of 16 planktonic species. After half a century of data gathering by numerous workers, our checklist includes 919 benthic and 32 planktonic species.

The first major post-1950s compilation of published species distribution data in the Gulf of Mexico (GMx) (Culver and Buzas 1981) was a component of a monumental literature survey of benthic foraminiferal species distribution in the seas around North America. Most of the 848 species in the Culver and Buzas list are included in ours, but there are important differences between the 2 compilations because of (1) nomenclatural changes prompted by recent research, (2) disagreements on synonymy, (3) different approaches regarding the inclusion of some species names (see the following), (4) slightly different geographic limits chosen for the region covered, and (5) new species reported in the past 25 years. All GMx data in our checklist, whether on depth or areal distribution, are taken from primary sources. Because of space limitations, however, only selected references have been cited. For revisions of many species names, we have

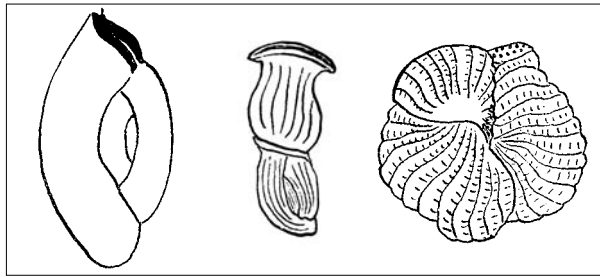


Foraminifera. After Chapman 1902.

used the opinions of Barker (1960), Loeblich and Tappan (1987, 1994), and Jones (1994). The suprageneric classification used in this chapter is based on Loeblich and Tappan (1987), with modifications taken from Loeblich and Tappan (1992, 1994), Revets (1996), Sen Gupta (1999), and Kaminski (2004). As in Phleger and Parker (1954), all species in our checklist are morphospecies; that is, the taxonomy is based entirely on shell morphology.

Only definitely identified species are included in the list. Names with “cfs,” “affs,” or question marks were excluded. This affects especially the species list in the classic work by Norton (1930), where 30 GMx taxa were reported as “sp. cf.,” these occurrences were used by Culver and Buzas (1981) but not by us.

Foraminiferal species, in general, are widely distributed. Notwithstanding excessive taxonomic splitting and inadequate sampling coverage in many ocean basins, this distribution partly supports the hypothesis of “ubiquitous dispersal” of protistan species (e.g., Finlay and Esteban 2001). Using the standard ecological definition of endemism—that is, restriction to a single geographic region (e.g., Lincoln, Boxshall, and Clark 1998)—we recognized only 35 endemics among the benthic species and none



Foraminifera. After Chapman 1902.

among the planktonic species. There are 33 GMx benthic species for which we could find fossil records, but no records of living populations, in other areas; we do not consider these as GMx endemics. The distribution of the endemic species among 4 broadly defined categories (based on differences in shell construction) are given in the taxon summary. These categories (“subgroups” in the summary table) are as follows:

1. Benthic species, organic-walled shells: Order Allogromiida.
2. Benthic species, agglutinated shells (composed of substrate particles): Orders Astrorhizida, Lituolida, Loftusiida, and Textulariida.
3. Benthic species, calcareous shells (composed of secreted calcium carbonate): Orders Miliolida, Carterinida, Spirillinida, Lagenida, Buliminida, Rotaliida, and Robertinida.
4. Planktonic species, calcareous shells: Order Globigerinida.

In the checklist, the orders are listed phylogenetically, but within each order, the superfamilies, families, genera, and species are listed alphabetically. For ecological information, benthic and planktonic species are treated differently. For benthic species, we give their occurrences in various oceans and seas: Atlantic (including Mediterranean), Caribbean, Pacific, Indian, Arctic, and Southern. Following Boltovskoy (1984), we designate the GMx benthic species occurring also in the Atlantic, Pacific, and Indian Oceans (besides other oceans, in many cases) as “cosmopolitan.” There are 316 such species in our list, but we surmise that there are many more cosmopolitan species (by the previous definition) that have not yet been reported because of (1) the patchiness and small size of their populations and (2) inadequate surveys in some basins.

Transport of shells of shallower-water benthic Foraminifera into deeper water by sediment movement is a

major hindrance to the estimation of habitat depth limits. We have taken a conservative approach to this estimation by (1) excluding some strikingly disjunct depth occurrences (especially of well-known species), and (2) using the comments of authors regarding displaced Foraminifera in their material (e.g., Phleger and Parker 1951). Even then, the real maximum depth for many species in our list may be much less than what we have entered. The depths are given in meters, except where they are unreported by the observers; a few depths are given as “shelf” or “shallow,” because that is how they were reported. All depth ranges in the checklist are just for GMx. A few species are known only from upheaved mudlump sediment (Lankford 1959, Andersen 1961); their habitat water depths are unknown. These mudlump occurrences are indicated in the checklist.

Overall, the documentation regarding microhabitats and adaptive strategies is unsatisfactory for GMx benthic foraminifers, but we use the following designations for some species: (1) intertidal and/or marsh; (2) bathyal and/or abyssal (habitat depth greater than about 200 m, but rare GMx bathyal species occurring in much shallower waters elsewhere are not given this label); (3) sessile (only for species firmly attached to substrate); (4) meroplanktonic (all, except one, with a float-chamber stage); and (5) endosymbiont (species with algal endosymbionts).

Planktonic foraminiferal species (Order Globigerinida) are widespread in world oceans, a few being nearly ubiquitous in open marine waters. High abundances of most species, however, are limited to particular east-west (crudely latitudinal) biogeographic belts (e.g., Bé 1977, Kennett and Srinivasan 1983, Hilbrecht 1996, Arnold and Parker 1999). In spite of some pronounced differences in the distribution of planktonic Foraminifera between the northern and southern hemispheres, or between major oceans, to summarize global extents of these species in terms of latitudinal belts, rather than by names of oceans, is more logical. The geographic ranges of the belts mentioned in our checklist (terminology modified from Kennett and Srinivasan 1983) are as follows: (1) Tropical: ~20° N to 20° S; (2) North Subtropical: ~20–30° N; (3) South Subtropical: ~20–30° S; (4) North Transitional: ~30–35° N; (5) South Transitional: ~30–35° S; (6) North Temperate: ~35–45° N; (7) South Temperate: ~35–45° S; (8) Subarctic: ~45–60° N; (9) Subantarctic: ~45–60° S; (10) Arctic: Higher than ~60° N; (11) Antarctic: Higher than ~60° S.

In diverse oceans, many planktonic foraminiferal spe-

cies show clear depth preferences in the water column. Judging by plankton-net data, some species live mainly in depths less than 50 m, some between 50 m and 100 m, and some in deeper waters. Such depth preferences, however, do not imply *restrictions* of species to such narrow depth intervals, and there are significant temporal and ontogenetic variations in depth levels of planktonic foraminiferal habitats (e.g., Bé 1977, Arnold and Parker 1999). The depth limits of the planktonic species in our checklist are especially hard to estimate because (1) the data on their abundance or occurrence in GMx come largely from seafloor sediment samples, and not from plankton tows (exceptions: Phleger 1951, Jones 1971, Leavesley et al. 1978); and (2) published summaries of global depth preferences are inappropriate for estimating absolute depth ranges of species in GMx. Thus, we refrain from giving depth figures in our checklist for planktonic species.

Abbreviations

Group 1, Habitat/biology: bab = bathyal and/or abyssal; ben = benthic; esb = endosymbiont; itm = intertidal and/or marsh; mpl = meroplanktonic; mul = mudlump; plk = planktonic; ses = sessile.

Group 2, Geographic range, benthic species: Arc = Arctic Ocean; Atl = Atlantic Ocean (including Mediterranean Sea); Carib = Caribbean Sea; Ind = Indian Ocean; Pac = Pacific Ocean; South = Southern Ocean.

Group 3, Geographic range, planktonic species (Order Globigerinida): antarctic = Antarctic; arc = Arctic; disjunct 1 = disjunct distribution: Arctic to North Subtropical, Antarctic to South Subtropical; disjunct 2 = disjunct distribution: Subarctic to North Subtropical, Subantarctic to South Subtropical; n subtrop = North Subtropical; n temp = North Temperate; n trans = North Transitional; s subtrop = South Subtropical; s temp = South Temperate; s trans = South Transitional; subantarctic = Subantarctic; subarc = Subarctic; trop = Tropical.

Abbreviation in endnotes: HVH = Louisiana State University Museum of Natural Science, H. V. Howe Collection of Microfossils.

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Taxonomic summary for Foraminifera of the Gulf of Mexico.

Component subgroup	Total species	Endemic species
Benthic, organic-walled shells	3	1
Benthic, agglutinated shells	231	8
Benthic, calcareous shells	685	26
Planktonic, calcareous shells	32	0
Total	951	35

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico.

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Class: Foraminifera					
Order: Allogromiida					
Family: Allogromiidae					
<i>Allogromia laticollaris</i> Arnold, 1948	ben, itm	0–1	GMx, Atl, Pac	ne	5, 37, 66
<i>Argillotuba vermiformis</i> (Goës, 1896)	ben, bab	1335–1719	GMx (endemic)	ne	7, 38, 98
<i>Nodellum membranaceum</i> (Brady, 1879)	ben, bab	710–3515	cosmopolitan	nw, ne	119, 141
Order: Astrorhizida					
Superfamily: Ammodiscacea					
Family: Ammodiscidae					
<i>Ammodiscoides turbinatus</i> Cushman, 1909	ben, bab	358–2805	GMx, s Atl	nw, ne	38, 119
<i>Ammodiscus anguillae</i> Höglund, 1947	ben	2–1972	cosmopolitan	entire	37, 38, 76, 105, 108 ¹
<i>Ammodiscus planorbis</i> Höglund, 1947	ben, bab	375–2313	GMx, Atl, Pac	nw, ne	119
<i>Ammodiscus reesi</i> LeRoy, 1975	ben	78–1067	GMx (endemic)	nw	90, 113, 135, 140
<i>Ammodiscus tenuis</i> (Brady, 1881)	ben, bab	525–3850	GMx, Atl, Pac	nw, ne, sw	37, 76, 119, 135, 140
<i>Ammolagena clavata</i> (Jones & Parker, 1860)	ben, bab, ses	358–3292	cosmopolitan	nw, ne	38, 90, 119, 140
<i>Glomospira gordialis</i> (Jones & Parker, 1860)	ben	0–3700	cosmopolitan	entire	35, 38, 108, 119, 142
<i>Tolypammina schaudinni</i> Rhumbler, 1904	ben, ses	77–3650	GMx, Atl, Pac	entire	35, 103, 117, 119
<i>Tolypammina vagans</i> (Brady, 1879)	ben, bab, ses	358–2432	cosmopolitan	nw, ne	38, 90
<i>Usbekistania charoides</i> (Jones & Parker, 1860)	ben	1–3850	cosmopolitan	entire	76, 105, 117, 120, 135
Superfamily: Astrorhizacea					
Family: Astrorhizidae					
<i>Pelosina cylindrica</i> Brady, 1884	ben, bab	1335–2160	cosmopolitan	ne	38 ²
<i>Pelosina variabilis</i> Brady, 1879	ben, bab	358–2160	GMx, Atl, Pac, Arc, South	ne	38 ²
Family: Dryorhizopsidae					
<i>Sagenina divaricans</i> Cushman, 1910	ben, ses	10–20	GMx, Pac, Ind	nw, ne	100 ³
<i>Sagenina frondescens</i> (Brady, 1879)	ben, ses	35–49	GMx, Carib, Pac	nw	137
Family: Halyphysemidae					
<i>Dendronina arborescens</i> Heron-Allen & Earland, 1922	ben, ses	49–55	GMx, Pac, South	nw	137
<i>Halyphysema tumanowiczii</i> Bowerbank, 1862	ben, ses	~15–1067	cosmopolitan	nw, se	41, 90 ⁴
Family: Rhabdamminidae					
<i>Bathysiphon filiformis</i> Sars, 1872	ben, bab	280–2441	cosmopolitan	nw, ne, sw	67, 108, 119
<i>Bathysiphon rufus</i> de Folin, 1886	ben, bab	1067–1335	cosmopolitan	nw, ne	38, 90
<i>Marsipella elongata</i> Norman, 1878	ben, bab	903–2125	GMx, Carib, Atl, Pac, South	ne	119

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Oculosiphon linearis</i> (Brady, 1879)	ben, bab	358–3488	GMx, Carib, Atl, Pac, South	nw, ne	7, 38, 52, 119
<i>Rhabdammina abyssorum</i> Sars, 1869	ben, bab	165–3488	cosmopolitan	nw, ne, sw	38, 52, 53, 110, 119
<i>Rhabdammina cornuta</i> (Brady, 1879)	ben, bab	1286–3292	GMx, Carib, Atl, Pac, South	nw	119
<i>Rhabdammina discreta</i> Brady, 1881	ben, bab	1067–2608	cosmopolitan	nw, ne	38, 90, 140 ⁵
Superfamily: Hippocrepinacea					
Family: Hippocrepinidae					
<i>Jaculella acuta</i> Brady, 1879	ben	19	GMx, Carib, Atl, Pac, Arc	ne	21
Family: Hyperamminidae					
<i>Hyperammina cylindrica</i> Parr, 1950	ben, bab	1373–3292	GMx, Atl, Pac, South	nw	119
<i>Hyperammina distorta</i> Cushman, 1918	ben, bab	384	GMx, Atl	ne	38
<i>Hyperammina elongata</i> Brady, 1878	ben	19–3550	cosmopolitan	nw, ne	21, 38, 76, 113, 141
<i>Hyperammina friabilis</i> Brady, 1884	ben, bab	358–3550	cosmopolitan	nw, ne	38, 76, 119
<i>Hyperammina laevigata</i> Wright, 1891	ben, bab	280–2160	cosmopolitan	nw, ne	38, 90, 119
<i>Saccorhiza ramosa</i> (Brady, 1879)	ben, bab	358–3850	cosmopolitan	nw, ne, sw	38, 52, 76, 119, 140
Superfamily: Komokiacea					
Family: Rhizamminidae					
<i>Aschemonella catenata</i> (Norman, 1877)	ben, bab	1644–3515	GMx, Carib, Atl, Pac	nw	119 ²
<i>Aschemonella ramuliformis</i> Brady, 1884	ben, bab	548–3732	GMx, Carib, Atl, Pac, South	nw, ne, sw	119 ^{2,6}
<i>Aschemonella scabra</i> Brady, 1879	ben, bab	1286	GMx, Atl, Pac, Arc, South	nw	119 ²
<i>Rhizammina algaeformis</i> Brady, 1879	ben, bab	639–2281	cosmopolitan	nw, ne	32, 52, 76, 119
<i>Rhizammina indivisa</i> Brady, 1884	ben, bab	2160–2491	GMx, Carib, Atl, Pac, Arc, South	ne	38 ⁷
Superfamily: Psammosphaeracea					
Family: Polysaccamminidae					
<i>Polysaccammina ipohalina</i> Scott, 1976	ben, itm	<1	GMx, Atl, Pac	nw, ne	30, 142
Family: Psammosphaeridae					
<i>Psammosphaera fusca</i> Schulze, 1875	ben	4–2432	cosmopolitan	ne, se	18, 38
Superfamily: Saccamminacea					
Family: Crithioninidae					
<i>Crithionina hispida</i> Flint, 1899	ben, bab	768–2683	GMx, Atl, Pac, South	ne	38
<i>Crithionina pisum</i> Goës, 1896	ben, bab	1719	cosmopolitan	ne	38
Family: Saccamminidae					
<i>Iridia diaphana</i> Heron-Allen & Earland, 1914	ben	shallow	cosmopolitan	se	41
<i>Lagenammina atlantica</i> (Cushman, 1944)	ben	1–3017	GMx, Carib, Atl, Pac, Arc	nw, ne, sw	52, 87, 108, 117
<i>Lagenammina difflugiformis</i> (Brady, 1879)	ben	2–3515	cosmopolitan	nw, ne	21, 117, 119, 135, 144
<i>Pseudothurammina limnetis</i> (Scott & Medioli, 1980)	ben, itm	<1	GMx, Atl, Pac	nw	142
<i>Saccammina lagenaria</i> (Berthelin, 1880)	ben, itm	0–2	GMx, Atl, Pac	nw, ne	118, 122
<i>Saccammina socialis</i> Brady, 1884	ben, bab	819–1564	GMx, Atl, Pac, Arc, South	nw, ne	90, 119
<i>Saccammina sphaerica</i> Brady, 1871	ben	110–3850	cosmopolitan	entire	38, 76, 77, 154
<i>Saccammina testacea</i> (Flint, 1899)	ben, bab	358–384	GMx, Carib, Atl	ne	38

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Technitella legumen</i> Norman, 1878	ben, bab	181	GMx, Atl, Pac, Arc	nw	119
<i>Thurammina favosa</i> Flint, 1899	ben	48–768	GMx, Carib, Atl, Arc, South	ne	38
<i>Thurammina papillata</i> Brady, 1879	ben, bab	232–3488	cosmopolitan	nw, ne	90, 119
Family: Stegnamminidae					
<i>Storthosphaera albida</i> Schulze, 1875	ben, bab	358–1335	GMx, Atl, Pac	ne	38
Order: Lituolida					
Superfamily: Hormosinacea					
Family: Dusenburyinidae					
<i>Dusenburyiana procera</i> (Goës, 1889)	ben	73	GMx, Carib, Atl, Pac	se	18
Family: Hormosinidae					
<i>Hormosina bacillaris</i> (Brady, 1881)	ben, bab	832	cosmopolitan	nw	119
<i>Hormosina globulifera</i> Brady, 1879	ben, bab	305–3850	cosmopolitan	entire	39, 76, 119
<i>Hormosina normani</i> (Brady, 1881)	ben, bab	933	cosmopolitan	nw	140
<i>Hormosina ovaliformis</i> Cushman, 1910	ben	124–1335	GMx, Carib, Pac	ne	39
<i>Hormosina pilulifera</i> (Brady, 1884)	ben, bab	384–3515	cosmopolitan	nw, ne	39, 119
<i>Warrenita palustris</i> (Warren, 1957)	ben, itm	0–1	GMx, w Atl	ne	87, 158
Family: Reophacidae					
<i>Reophax agglutinatus</i> Cushman, 1913	ben	108–1241	GMx, Carib, Atl, Pac	nw, ne, sw	52, 90, 108, 109
<i>Reophax bilocularis</i> Flint, 1897	ben	73	cosmopolitan	se	18
<i>Reophax dentaliniformis</i> Brady, 1881	ben	19–3431	cosmopolitan	entire	21, 39, 108, 120, 141
<i>Reophax fusiformis</i> (Williamson, 1858)	ben	19	GMx, Atl, Pac, Arc, South	ne	21, 133
<i>Reophax hispidulus</i> Cushman, 1920	ben	46–3283	GMx, Carib, Atl, Pac	ne, se	103, 117
<i>Reophax irregularis</i> Parker, 1954	ben	42–256	GMx, Atl	ne	103, 117
<i>Reophax nana</i> Rhumbler, 1911	ben	0–63	cosmopolitan	nw, ne, sw	10, 87, 108, 110, 142
<i>Reophax nodulosus</i> Brady, 1879	ben	15–3250	cosmopolitan	nw, ne, se	21, 39, 112, 119, 141
<i>Reophax scorpiurus</i> de Montfort, 1808	ben	11–3488	cosmopolitan	entire	108, 109, 117, 119 ⁸
<i>Reophax scottii</i> Chaster, 1892	ben	67–190	GMx, Carib, Atl, Pac	ne	95, 103
<i>Reophax spiculifer</i> Brady, 1879	ben, bab	3184–3270	GMx, Carib, Atl, Pac, South	ne	119
Superfamily: Hormosinellacea					
Family: Hormosinellidae					
<i>Archimerismus subnodosus</i> (Brady, 1884)	ben	19–1747	cosmopolitan	nw, ne	21, 119, 140
<i>Hormosinella carpenteri</i> (Brady, 1881)	ben, bab	468–3515	GMx, Atl	nw, ne	119 ⁵
<i>Hormosinella distans</i> (Brady, 1881)	ben, bab	280–3515	cosmopolitan	entire	35, 117, 119 ⁹
<i>Hormosinella guttifera</i> (Brady, 1881)	ben	79–2280	cosmopolitan	nw, ne, sw	103, 108, 117, 119
<i>Hormosinella ovicula</i> (Brady, 1879)	ben	47–2975	cosmopolitan	nw, ne	39, 114, 119
<i>Subreophax aduncus</i> (Brady, 1882)	ben, bab	305–2432	cosmopolitan	nw, ne, se	39, 140
<i>Subreophax monile</i> (Brady, 1881)	ben, bab	1067–1335	GMx, Carib, Atl, Pac	nw, ne	39, 90
Superfamily: Lituolacea					
Family: Discamminidae					
<i>Ammoscalaria pseudospiralis</i> (Williamson, 1858)	ben	0–216	cosmopolitan	nw, ne, sw	17, 56, 108, 117, 118
<i>Ammoscalaria tenuimargo</i> (Brady, 1882)	ben, bab	384–3237	GMx, Carib, Atl, Pac	ne, se	39, 117

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Discammina compressa</i> (Göes, 1882)	ben	11–2432	GMx, Carib, Atl, Pac	nw, ne, sw	19, 39, 113, 135
<i>Glaphyrammina americana</i> (Cushman, 1910)	ben	152–2896	cosmopolitan	nw, ne	119
Family: Haplophragmoididae					
<i>Buzasina ringens</i> (Brady, 1879)	ben	49–2560	cosmopolitan	nw, ne	39, 117, 119
<i>Evolutinella rotulata</i> (Brady, 1881)	ben, bab	unknown	GMx, Carib, Atl, South	nw, ne, sw	135 ¹⁰
<i>Haplophragmoides columbiensis</i> Cushman, 1925	ben, itm	0–1	GMx, Atl, Pac	nw, sw	56, 127
<i>Haplophragmoides manilaensis</i> Andersen, 1952	ben, itm	0–7	GMx, Carib, Atl, Pac	nw, ne	87, 142, 158, 160 ¹¹
<i>Haplophragmoides mexicana</i> Kornfeld, 1931	ben	9–43	GMx, w Atl	nw, ne	11, 12, 84
<i>Haplophragmoides sphaeriloculus</i> Cushman, 1910	ben, bab	232–3515	cosmopolitan	nw, ne	119
<i>Haplophragmoides subinvolutum</i> Cushman & McCullough, 1939	ben	0–6	GMx, e Pac	nw, ne	121, 122, 127, 155
<i>Haplophragmoides wilberti</i> Andersen, 1953	ben, itm	0–3	cosmopolitan	nw, ne	81, 158, 160
<i>Trochammina irregularis</i> Cushman & Brönnimann, 1948	ben, itm	0–1	cosmopolitan	nw, ne	30, 81, 158
<i>Trochammina salsa</i> (Cushman & Brönnimann, 1948)	ben, itm	0–1	GMx, Carib, Atl, Pac	nw, ne	30, 157
<i>Veleroninoides jeffreysii</i> (Williamson, 1858)	ben	165–3292	cosmopolitan	nw, ne, sw	52, 56, 78, 110, 119
<i>Veleroninoides scitulus</i> (Brady, 1881)	ben	91–2972	GMx, Carib, Atl, Pac, South	entire	39, 117, 119, 135
<i>Veleroninoides wiesneri</i> (Parr, 1950)	ben	21–3850	cosmopolitan	entire	35, 76, 108, 119
Family: Lituolidae					
<i>Ammoastuta inepta</i> (Cushman & McCulloch, 1939)	ben, itm	0–3	GMx, Carib, Atl, Pac	nw, ne, sw	87, 118, 129, 142 ¹²
<i>Ammoastuta salsa</i> Cushman & Brönnimann, 1948	ben, itm	0–3	GMx, Carib, Atl, South	nw, ne	30, 81, 158, 160
<i>Ammobaculites agglutinans</i> (d'Orbigny, 1846)	ben	1–2050	cosmopolitan	nw, ne, se	21, 39, 58, 119, 159
<i>Ammobaculites crassus</i> Warren, 1957	ben, itm	0–1	GMx, Atl	nw, ne	157, 158
<i>Ammobaculites dilatatus</i> Cushman & Brönnimann, 1948	ben	0–31	GMx, Carib, Atl, Pac	nw, ne, sw	10, 118, 124, 142, 158
<i>Ammobaculites diversus</i> Cushman & Brönnimann, 1948	ben	4–6	GMx, Carib	ne	155
<i>Ammobaculites exiguus</i> Cushman & Brönnimann, 1948	ben	0–34	cosmopolitan	nw, ne, sw	12, 17, 87, 108, 124
<i>Ammobaculites exilis</i> Cushman & Brönnimann, 1948	ben	0–10	GMx, Carib, Atl	nw, ne	12, 121, 135, 155
<i>Ammobaculites filiformis</i> Earland, 1934	ben, bab	830–3600	cosmopolitan	nw	52, 76, 119, 135, 140
<i>Ammobaculites gyrensis</i> Reynolds, 1982	ben, bab	933–1081	GMx (endemic)	nw	140
<i>Ammobaculites lituolinoideum</i> (Goës, 1896)	ben, bab	635–2160	GMx, nw Atl	nw, ne	39, 119
<i>Ammobaculites reophaciformis</i> Cushman, 1910	ben	13–20	GMx, Carib, Pac	se	41
<i>Ammomarginulina fluvialis</i> (Parker, 1952)	ben, itm	<6	GMx, nw Atl	ne, sw	56, 121
<i>Ammotium cassis</i> (Parker, 1870)	ben, itm	0–1	GMx, w Atl	ne	37, 158
<i>Ammotium directum</i> (Cushman & Brönnimann, 1948)	ben, itm	2	GMx, Carib, Pac	sw	73
<i>Ammotium multiloculatum</i> Warren, 1957	ben, itm	1	GMx (endemic)	nw	158

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Ammotium salsum</i> (Cushman & Brönnimann, 1948)	ben	0–18	GMx, Carib, Atl, Pac	nw, ne, sw	12, 118, 129, 142, 160
<i>Ammotium subdirectum</i> Warren, 1957	ben, itm	0–2	GMx (endemic)	ne	158
<i>Eratidus foliaceus</i> (Brady, 1881)	ben	49–3292	cosmopolitan	nw, ne, sw	39, 108, 119
Family: Placopsilinidae					
<i>Placopsilina bradyi</i> Cushman & McCulloch, 1939	ben, ses	1–55	cosmopolitan	entire	39, 57, 108, 137 ¹³
Superfamily: Lituotubacea					
Family: Lituotubidae					
<i>Lituotuba lituiformis</i> (Brady, 1879)	ben	27–2281	GMx, Carib, Atl, Ind	nw, ne, se	18, 39, 90, 119
Family: Trochamminoidae					
<i>Trochamminoides coronatus</i> (Brady, 1879)	ben, bab	1373–2281	GMx, Carib, Atl	nw	80, 119
<i>Trochamminoides proteus</i> (Karrer, 1866)	ben, bab	768–2160	GMx, Carib, Atl, Pac, Arc	nw, ne	39, 90
Superfamily: Recurvoidacea					
Family: Ammosphaeroidinidae					
<i>Ammosphaeroidina sphaeroidiniforme</i> (Brady, 1884)	ben, bab	358–369	cosmopolitan	nw, ne	39, 119
<i>Cribrostomoides lobatus</i> (Herrmann, 1917)	ben, bab	560–2538	GMx (fossils in Europe)	nw, ne	119
<i>Cribrostomoides nitidus</i> (Goës, 1896)	ben	128–3237	GMx, Carib, Atl, Pac	entire	36, 52, 117
<i>Cribrostomoides subglobosus</i> (Cushman, 1910)	ben	19–3850	cosmopolitan	entire	21, 76, 78, 117, 135
<i>Cribrostomoides umbilicatus</i> (Pearcey, 1914)	ben, bab	646–2092	GMx, South	nw, ne	119
<i>Cystamina pauciloculata</i> (Brady, 1879)	ben, bab	459–1397	cosmopolitan	nw, ne	119
<i>Recurvoides contortus</i> Earland, 1934	ben, bab	525–3515	cosmopolitan	nw, ne	90, 119
<i>Recurvoides turbinatus</i> (Brady, 1881)	ben	49–305	GMx, Carib, Atl, Pac, Arc, South	ne, se	39
Superfamily: Rzehakinacea					
Family: Rzehakinidae					
<i>Ammoflinitina trihedra</i> Earland, 1934	ben, bab	1067	GMx, Atl, South	nw	90
<i>Miliamina fusca</i> (Brady, 1870)	ben	0–18	cosmopolitan	nw, ne, sw	10, 30, 87, 118 ¹⁴
Superfamily: Spiroplectamminacea					
Family: Nouriidae					
<i>Nouria polymorphinoides</i> Heron-Allen & Earland, 1914	ben	4–75	cosmopolitan	entire	18, 56, 87, 117, 124
Family: Spiroplectamminidae					
<i>Spiroplectamina floridana</i> (Cushman, 1922)	ben	16–768	GMx, Carib, Atl	entire	21, 40, 56, 117, 120
<i>Spiroplectella cylindroides</i> Earland, 1934	ben, bab	1538–3850	GMx, s Atl	nw, ne, sw	76, 77, 119
<i>Spiroplectinella wrightii</i> (Silvestri, 1903)	ben	110	cosmopolitan	se	78, 154 ¹⁵
<i>Vulvulina pennatula</i> (Batsch, 1791)	ben	124	cosmopolitan	ne	40, 78
Superfamily: Trochamminacea					
Family: Adercotrymidae					
<i>Adercotryma glomeratum</i> (Brady, 1878)	ben	102–3850	cosmopolitan	entire	53, 76, 117, 119, 120
Family: Remaneicidae					
<i>Remaneica kellestae</i> (Thalman, 1932)	ben	73	GMx, Atl, Pac	se	18
<i>Remaneica plicata</i> (Terquem, 1876)	ben	26–40	GMx, Carib, Atl	nw	137

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Family: Trochamminidae					
<i>Ammoglobigerina globulosa</i> (Cushman, 1920)	ben	21–3164	GMx, Carib, Atl, Ind, South	nw, ne, sw	39, 52, 108, 117, 119
<i>Arenoparrella mexicana</i> (Kornfeld, 1931)	ben, itm	0–3	GMx, Carib, Atl, Pac	nw, ne, sw	8, 17, 89, 118
<i>Jadammina macrescens</i> (Brady, 1870)	ben, itm	0–2	cosmopolitan	nw, ne, sw	30, 87, 118, 126, 129
<i>Lepidodeuterammina ochracea</i> (Williamson, 1858)	ben, ses	11–576	cosmopolitan	sw	108
<i>Paratrochammina challengerii</i> Brönnimann & Whittaker, 1988	ben	49–3632	cosmopolitan	entire	39, 76, 90, 100, 135 ¹⁶
<i>Paratrochammina simplissima</i> (Cushman & McCulloch, 1948)	ben	43–52	cosmopolitan	ne	12, 26
<i>Polystomammina nitida</i> (Brady, 1881)	ben	unknown	cosmopolitan	nw	76
<i>Pseudotrochammina dehiscens</i> (Frerichs, 1969)	ben, bab	746–2538	GMx (endemic)	nw, ne	65, 119
<i>Pseudotrochammina mexicana</i> Frerichs, 1969	ben, bab	373–1827	GMx (endemic)	nw, ne	65, 119
<i>Pseudotrochammina triloba</i> Frerichs, 1969	ben, bab	746–3292	GMx, Atl	nw, ne	65, 119
<i>Rotaliammina squamiformis</i> (Cushman & McCulloch, 1939)	ben, ses	26–55	GMx, e Pac	nw	137
<i>Rotaliammina trumbullii</i> Seiglie & Bermúdez, 1977	ben, ses	26–40	GMx, Carib	nw	137
<i>Tiphrocha comprimata</i> (Cushman & Brönnimann, 1948)	ben, itm	0–3	GMx, Carib, Atl, Pac	nw, ne	30, 116, 127, 142, 160
<i>Tritaxis challengerii</i> (Hedley, Hurdle, & Burdett, 1964)	ben	56–99	GMx, Carib, Atl, Pac	sw	78, 108
<i>Tritaxis conica</i> (Earland, 1934)	ben, bab	280–1322	GMx, Atl, South	nw, ne	119
<i>Tritaxis fusca</i> (Williamson, 1858)	ben	73–1456	cosmopolitan	nw, ne, se	18, 119
<i>Trochammina advena</i> Cushman, 1922	ben	9–2700	GMx, Carib, Atl, Pac, Arc	entire	36, 41, 76, 117, 120
<i>Trochammina compacta</i> Parker, 1952	ben	<20	GMx, w Atl	ne	111
<i>Trochammina inflata</i> (Montagu, 1808)	ben, itm	0–2	cosmopolitan	entire	10, 87, 92, 118, 129
<i>Trochammina japonica</i> Ishiwada, 1950	ben, bab	280–2281	GMx, Atl, Pac, Arc	nw, ne	52, 76, 119
<i>Trochammina laevigata</i> Cushman & Brönnimann, 1948	ben	3–4	GMx, Carib, Atl, Pac	ne	12
<i>Trochammina lobata</i> Cushman, 1944	ben	0–25	GMx, w Atl	ne	87, 158
<i>Trochammina quadriloba</i> Höglund, 1948	ben	62–3246	GMx, Carib, Atl, Arc	ne, se, sw	35, 56, 103, 109, 117
<i>Trochammina squamata</i> Jones & Parker, 1860	ben	1–2700	cosmopolitan	entire	76, 112, 119, 135 ¹⁷
<i>Trochammina subglabra</i> Saidova, 1961	ben, bab	1500–1900	GMx, Pac, Ind	nw	119
<i>Trochammina subturbinata</i> Cushman, 1920	ben, bab	2160–2896	GMx, Carib, Atl	ne	39, 119
<i>Trochammina tasmanica</i> Parr, 1950	ben, bab	375–2281	GMx, s Pac	nw, ne	52, 119
Superfamily: Verneuilinacea					
Family: Prolixoplectidae					
<i>Prolixoplecta parvula</i> (Cushman, 1922)	ben	80–793	GMx, Carib, Atl, Pac	nw, ne, sw	34, 40, 52, 133
Family: Reophacellidae					
<i>Gaudryina aequa</i> Cushman, 1947	ben	21–239	GMx, Carib, Atl	nw, ne, sw	12, 52, 108
<i>Gaudryina exilis</i> Cushman & Brönnimann, 1948	ben	0–56	GMx, Carib, Atl, Ind	nw, ne, sw	17, 108, 118, 124, 142

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Gaudryina minuta</i> Earland, 1934	ben	42–2019	GMx, Atl, South	nw	113, 114, 119
<i>Siphogaudryina compressa</i> (Cushman, 1935)	ben	23–99	GMx, Carib	sw	36, 110, 162
Order: Loftusiida					
Superfamily: Ataxophragmiacea					
Family: Globotextulariidae					
<i>Globotextularia anceps</i> (Brady, 1884)	ben	73–2281	cosmopolitan	nw, se	18, 90, 119
<i>Liebusella soldanii</i> (Jones & Parker, 1860)	ben	16–384	GMx, Carib, Atl, Pac	entire	21, 34, 39, 56, 119 ¹⁸
<i>Verneuilinulla advena</i> (Cushman, 1922)	ben	0–99	cosmopolitan	nw, sw	95, 108, 142
<i>Verneuilinulla affixa</i> (Cushman, 1911)	ben, bab	768–2432	GMx, Carib, Atl, Pac	nw, ne	40, 90
<i>Verneuilinulla propinqua</i> (Brady, 1884)	ben, bab	369–1692	GMx, Carib, Atl, Pac, South	nw, ne, sw	36, 76, 119
Family: Textulariellidae					
<i>Guppyella pozonensis</i> (Cushman & Renz, 1941)	ben, bab	232–938	GMx (fossils in Venezuela)	nw, ne	119
<i>Textulariella barrettii</i> (Jones & Parker, 1876)	ben	16–786	GMx, Carib, Atl	entire	12, 36, 40, 54, 56, 109
Superfamily: Coscinophragmatacea					
Family: Coscinophragmatidae					
<i>Bdelloidina aggregata</i> Carter, 1877	ben, ses	18–55	GMx, Carib, Pac, Ind	nw, se	18, 137
Superfamily: Loftusiacea					
Family: Cyclamminidae					
<i>Alveolophragmium orbiculatum</i> Stschedrina, 1936	ben	586	GMx, Pac	sw	108
<i>Cyclammina cancellata</i> Brady, 1879	ben, bab	398–2538	GMx, Carib, Atl, Pac	nw, ne, sw	36, 119, 120, 135
<i>Cyclammina pauciloculata</i> Cushman, 1917	ben, bab	358–2432	cosmopolitan	ne	39
<i>Cyclammina pusilla</i> Brady, 1881	ben, bab	1067	cosmopolitan	nw	90
<i>Cyclammina trullissata</i> (Brady, 1879)	ben, bab	819–1827	cosmopolitan	nw, ne	90, 119
<i>Reticulophragmium venezuelanum</i> (Maync, 1952)	ben, bab	373–1979	GMx (fossils in Carib, Ind)	nw, ne	90, 119
Order: Textulariida					
Superfamily: Eggerellacea					
Family: Eggerellidae					
<i>Dorothia caribaea</i> Cushman, 1936	ben, mul	unknown	GMx, Carib	ne	3
<i>Dorothia pseudoturris</i> (Cushman, 1922)	ben, bab	646–1979	GMx, Carib, Atl	nw, ne, se	40, 119
<i>Dorothia scabra</i> (Brady, 1884)	ben, bab	206–1067	GMx, Carib, Atl, Pac, South	nw, ne	52, 90, 119
<i>Eggerella bradyi</i> (Cushman, 1911)	ben	99–3850	cosmopolitan	entire	40, 76, 108, 117, 119
<i>Karrieriella bradyi</i> (Cushman, 1911)	ben	19–3632	cosmopolitan	nw, ne, sw	21, 52, 76, 119
<i>Karrieriella chilostoma</i> (Reuss, 1852)	ben, bab	415	GMx, Carib, Atl, Pac, South	ne	40
<i>Karrieriella novangliae</i> (Cushman, 1922)	ben, bab	2160	cosmopolitan	ne	40
<i>Karrerulina apicularis</i> (Cushman, 1911)	ben	15–3850	cosmopolitan	entire	40, 76, 113, 117, 135
<i>Martinottiella communis</i> (d'Orbigny, 1846)	ben, bab	384–2432	cosmopolitan	nw, ne	40, 52, 119
<i>Martinottiella occidentalis</i> (Cushman, 1922)	ben	0–3250	GMx, Carib, Atl	entire	36, 40, 104, 119
<i>Multifidella nodulosa</i> (Cushman, 1922)	ben, bab	576	GMx, Carib, Atl, South	sw	56

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Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Family: Pseudogaudryinidae					
<i>Migros flintii</i> (Cushman, 1911)	ben	110–2268	cosmopolitan	entire	36, 40, 112, 117, 119
<i>Pseudoclavulina gracilis</i> Cushman & Brönnimann, 1948	ben, itm	0–4	GMx, Carib, Atl	nw	118, 126
<i>Pseudoclavulina mexicana</i> (Cushman, 1922)	ben	1–2432	GMx, Carib, Atl	nw, ne, sw	21, 40, 108, 120
<i>Pseudogaudryina atlantica</i> (Bailey, 1851)	ben	68–1316	GMx, Carib, Atl, Pac	entire	40, 103, 108, 113, 120
Family: Valvulaminidae					
<i>Discorinopsis aguayoi</i> (Bermúdez, 1935)	ben, itm	<9	GMx, Carib, Atl	nw, ne, se	17, 18, 21, 89, 92, 142
Family: Valvulinidae					
<i>Clavulina difformis</i> Brady, 1884	ben, itm	1–3	GMx, Carib, Pac, Ind	se	21, 68
<i>Clavulina flintiana</i> Cushman, 1922	ben	124–2432	GMx, Carib, Atl, Pac	ne, se	40
<i>Clavulina humilis</i> Brady, 1884	ben	~100	GMx, Pac	nw	115
<i>Clavulina nodosaria</i> d'Orbigny, 1839	ben	1–37	GMx, Carib	se	18, 41
<i>Clavulina tricarinata</i> d'Orbigny, 1839	ben	1–33	cosmopolitan	ne, se, sw	21, 41, 57, 92, 110
<i>Goesella mississippiensis</i> Parker, 1954	ben	55–2788	GMx (endemic)	nw, ne, sw	36, 113, 117, 135
<i>Valvulina oviedoiana</i> d'Orbigny, 1839	ben	0–586	GMx, Carib, Atl	ne, se, sw	40, 41, 57, 92, 109, 110
Superfamily: Textulariacea					
Family: Textulariidae					
<i>Bigenerina irregularis</i> Phleger & Parker, 1951	ben	1–195	GMx, Carib, Atl	entire	52, 53, 108, 117, 118 ¹⁹
<i>Bigenerina textularioidea</i> (Goës, 1894)	ben	2–349	GMx, Carib, Atl	ne, se	18, 21, 40, 112, 117
<i>Cribrobigenina parkerae</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Sahulina conica</i> (d'Orbigny, 1839)	ben	1–374	cosmopolitan	entire	56, 110, 112, 113, 117
<i>Siphotextularia affinis</i> (Fornasini, 1883)	ben	35–3632	GMx, Carib, Atl	nw, ne, sw	36, 54, 76, 119, 132
<i>Siphotextularia concava</i> (Karrer, 1868)	ben	4–110	GMx, Carib, Atl, Pac	ne, se	3, 18
<i>Siphotextularia curta</i> (Cushman, 1922)	ben	80–2697	cosmopolitan	nw, ne	40, 90, 103, 117, 119
<i>Siphotextularia olianaensis</i> Colom & Ruiz de Gaona, 1950	ben	79–157	GMx (fossils in Europe)	ne	12
<i>Siphotextularia rolshauseni</i> Phleger & Parker, 1951	ben	9–3515	GMx, Atl, Pac	entire	34, 36, 117, 119
<i>Textularia agglutinans</i> d'Orbigny, 1839	ben	0–143	cosmopolitan	entire	21, 34, 40, 41, 82, 112
<i>Textularia albatrossi</i> Cushman, 1922	ben	91–485	GMx, Carib	sw	36
<i>Textularia aura</i> Lalicker & McCullough, 1940	ben, itm	0–2	GMx, e Pac	nw	89
<i>Textularia calva</i> Lalicker, 1935	ben, mul	unknown	GMx, Carib, Atl, Pac	ne	3
<i>Textularia candeiana</i> d'Orbigny, 1839	ben	2–414	cosmopolitan	entire	21, 34, 92, 93, 113, 117
<i>Textularia earlandi</i> Parker, 1952	ben	0–1314	cosmopolitan	nw, ne	52, 89, 117, 119, 142
<i>Textularia foliacea occidentalis</i> Cushman, 1922	ben	16–446	GMx, Carib, Atl	entire	36, 40, 52, 56, 117, 120
<i>Textularia goesii</i> Cushman, 1911	ben	110–1741	GMx, Carib, Atl, Pac	se, sw	36, 112
<i>Textularia mayori</i> Cushman, 1922	ben	0–485	GMx, Carib, Atl	entire	36, 41, 113, 117, 142
<i>Textularia mexicana</i> Cushman, 1922	ben	18–2432	GMx, Carib, Atl	nw, ne, sw	36, 40, 52, 119, 120
<i>Textularia palustris</i> Warren, 1957	ben, itm	0	GMx, Atl	ne	87, 158

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Textularia porrecta</i> Brady, 1884	ben	shelf	cosmopolitan	ne	132, 133
<i>Textularia pseudogramen</i> Chapman & Parr, 1937	ben	1–1878	cosmopolitan	nw, ne, se	17, 76, 112, 154
<i>Textularia pseudotrochus</i> Cushman, 1922	ben	27–2432	GMx, Carib, Atl, South	ne, se, sw	12, 36, 40
<i>Textularia secasensis</i> Lalicker & McCulloch, 1940	ben	2–33	cosmopolitan	ne	12, 111
<i>Textularia sica</i> Lalicker & Bermúdez, 1941	ben	108–421	GMx, Atl, Ind	ne, se, sw	3, 86, 108
<i>Textularia subplana</i> Cushman, 1922	ben	110	GMx, Carib, Atl	se	18
<i>Textularia wiesneri</i> Earland, 1933	ben	27	GMx, Carib, South	se	18
Family: Thomasinellidae					
<i>Protoschista findens</i> (Parker, 1870)	ben, itm	0–2	GMx, Atl, Pac, Arc	nw	126
Order: Miliolida					
Superfamily: Alveolinacea					
Family: Alveolinidae					
<i>Borelis pulchra</i> (d'Orbigny, 1839)	ben, esb	1–29	GMx, Carib, Atl, Pac	se	45, 51, 92, 112
Superfamily: Cornuspiracea					
Family: Cornuspiridae					
<i>Cornuspira foliacea</i> (Philippi, 1844)	ben	2–1067	cosmopolitan	nw, ne, se	3, 21, 90
<i>Cornuspira incerta</i> (d'Orbigny, 1839)	ben	2	GMx, Carib, Pac	ne	17
<i>Cornuspira involvens</i> (Reuss, 1850)	ben	1–1426	cosmopolitan	ne, se, sw	17, 36, 41
<i>Cornuspira planorbis</i> Schultze, 1854	ben	1–1941	cosmopolitan	entire	21, 76, 108, 111
<i>Cornuspira selseyensis</i> Heron-Allen & Earland, 1909	ben	46	cosmopolitan	se	18
Superfamily: Miliolacea					
Family: Hauerinidae					
<i>Agglutinella agglutinans</i> (d'Orbigny, 1839)	ben	0–221	cosmopolitan	entire	12, 41, 52, 92, 93
<i>Ammomassilina alveoliniformis</i> (Millett, 1898)	ben	19–22	GMx, Carib, Pac, Ind	se	41
<i>Biloculinella irregularis</i> (d'Orbigny, 1839)	ben, bab	320–2560	cosmopolitan	entire	35, 76, 107, 117
<i>Biloculinella labiata</i> (Schlumberger, 1891)	ben	23–165	GMx, Atl, Ind	ne, sw	3, 56, 110
<i>Biloculinella toddae</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Cribropyrgo robusta</i> Cushman & Bermúdez, 1946	ben, bab	1067	GMx, Carib	nw	90
<i>Cruciloculina triangularis</i> d'Orbigny, 1839	ben	19–1067	GMx, Atl, Pac, South	nw, ne	21, 90
<i>Dentostomina bermudezi</i> Pérez Farfante, 1939	ben	11–36	GMx, Carib	sw	108
<i>Dentostomina bermudiana</i> Carman, 1933	ben	46	GMx, Carib, Atl	se	18
<i>Dentostomina enoplostoma</i> (d'Orbigny, 1839)	ben	27	GMx, Carib, Atl	se	18
<i>Flintinoides labiosa</i> (d'Orbigny, 1839)	ben	0–110	cosmopolitan	ne, se, sw	18, 20, 21, 41, 108
<i>Massilina annectens</i> Schlumberger, 1893	ben	3–29	GMx, Atl, Pac	nw, se	112, 138
<i>Massilina gualteriana</i> (d'Orbigny, 1839)	ben	18–46	GMx, Carib, Atl	se	18
<i>Massilina inaequalis</i> Cushman, 1921	ben	~1–16	GMx, Carib	nw, ne, se	51, 111, 151
<i>Massilina peruviana</i> (d'Orbigny, 1839)	ben	0–18	GMx, Carib, Atl, Pac	nw, sw	10, 89, 143, 151
<i>Massilina protea</i> Parker, 1953	ben	0–15	GMx, Carib, Atl, Pac	entire	10, 21, 118, 143, 159

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Massilina quadrans</i> Cushman & Ponton, 1932	ben	2–6	GMx (endemic)	nw	150
<i>Massilina secans</i> (d'Orbigny, 1826)	ben	0–110	cosmopolitan	ne, se	18, 21, 105
<i>Massilina stuckeyi</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Miliolinella antarctica</i> Kennett, 1967	ben	1067	GMx, South	nw	90
<i>Miliolinella californica</i> Rhumbler, 1936	ben	5–576	GMx, Carib, Pac	se, sw	56, 57, 108, 109, 110
<i>Miliolinella circularis</i> (Bornemann, 1855)	ben	0–152	cosmopolitan	entire	10, 21, 34, 41, 52, 137
<i>Miliolinella fichteliana</i> (d'Orbigny, 1839)	ben	0–229	GMx, Carib, Atl	entire	21, 22, 52, 108
<i>Miliolinella microstoma</i> Warren, 1957	ben	0–324	GMx (endemic)	entire	56, 108, 109, 126, 158
<i>Miliolinella suborbicularis</i> (d'Orbigny, 1839)	ben	0–37	cosmopolitan	nw, ne, se	18, 21, 105, 143, 151
<i>Miliolinella subrotunda</i> (Montagu, 1803)	ben	9–2125	cosmopolitan	nw, ne, se	106, 113, 119
<i>Miliolinella vigerasi</i> (Bermúdez, 1935)	ben	37	GMx (endemic)	se	18
<i>Miliolinella warreni</i> Andersen, 1961	ben	13–175	GMx (endemic)	ne, sw	3, 34, 109, 110, 132
<i>Nummuloculina contraria</i> (d'Orbigny, 1846)	ben	933–1067	GMx, Atl, Ind, South	nw	90, 140
<i>Proemassilina arenaria</i> (Brady, 1884)	ben	110	cosmopolitan	se	112, 154
<i>Pyrgo anomala</i> (Schlumberger, 1891)	ben	1–110	cosmopolitan	se	112
<i>Pyrgo carinata</i> (d'Orbigny, 1839)	ben	11	GMx, Carib, Atl	ne, sw	3, 34
<i>Pyrgo clypeata</i> (d'Orbigny, 1846)	ben	10–56	GMx (fossils in Europe)	nw, se	11, 51
<i>Pyrgo comata</i> (Brady, 1881)	ben	9–1067	cosmopolitan	nw, ne, sw	11, 56, 90, 109, 110
<i>Pyrgo denticulata</i> (Brady, 1884)	ben	0–132	cosmopolitan	entire	22, 41, 109, 112, 137
<i>Pyrgo depressa</i> (d'Orbigny, 1826)	ben	110–3515	cosmopolitan	entire	36, 44, 112, 119
<i>Pyrgo elongata</i> (d'Orbigny, 1826)	ben	16–2520	cosmopolitan	entire	34, 35, 56, 109, 119
<i>Pyrgo johnsoni</i> Cushman, 1935	ben	46	GMx, Carib	se	18
<i>Pyrgo lucernula</i> (Schwager, 1866)	ben	10–3488	cosmopolitan	entire	36, 112, 119 ²⁰
<i>Pyrgo murrhina</i> (Schwager, 1866)	ben	19–3700	cosmopolitan	entire	21, 35, 56, 117, 119
<i>Pyrgo nasuta</i> Cushman, 1935	ben	0–597	GMx, Carib, Atl	entire	52, 92, 108, 124 ²¹
<i>Pyrgo oblonga</i> (d'Orbigny, 1839)	ben	35–671	GMx, Carib, Atl, Pac	nw, ne	52, 132
<i>Pyrgo peruviana</i> (d'Orbigny, 1839)	ben	6–67	GMx, Atl, Pac	ne	12
<i>Pyrgo sarsi</i> (Schlumberger, 1891)	ben	110–1322	cosmopolitan	nw, ne, se	112, 119
<i>Pyrgo serrata</i> (Bailey, 1861)	ben	181–997	cosmopolitan	nw, ne, sw	36, 44, 52, 119
<i>Pyrgo subsphaerica</i> (d'Orbigny, 1839)	ben	0–175	GMx, Carib, Atl, Pac	entire	21, 41, 108, 109, 151
<i>Pyrgo vespertilio</i> (Schlumberger, 1891)	ben	16–933	cosmopolitan	entire	3, 56, 109, 112, 140
<i>Pyrgo williamsoni</i> (Silvestri, 1923)	ben	16–184	GMx, Atl, Pac, Arc	ne, se, sw	37, 108
<i>Pyrgoella sphaera</i> (d'Orbigny, 1839)	ben	14–2125	cosmopolitan	nw, ne, sw	3, 52, 110, 119
<i>Quinqueloculina antillarum</i> d'Orbigny, 1839	ben	1–27	GMx, Carib, Atl	ne, se	18, 21
<i>Quinqueloculina auberiana</i> d'Orbigny, 1839	ben	3–110	cosmopolitan	nw, ne, se	84, 112, 132
<i>Quinqueloculina barbouri</i> Bermúdez, 1935	ben	46	GMx (endemic)	se	18
<i>Quinqueloculina berthelotiana</i> d'Orbigny, 1839	ben	27–99	GMx, Carib, Atl	sw	108
<i>Quinqueloculina bicarinata</i> d'Orbigny, 1878	ben	2–926	GMx, Atl, Ind	entire	19, 21, 113, 115, 135
<i>Quinqueloculina bicornis</i> (Walker & Jacob, 1798)	ben	2–110	GMx, Carib, Atl	se, sw	34, 56, 57, 110, 112
<i>Quinqueloculina bicostata</i> d'Orbigny, 1839	ben	1–146	GMx, Carib, Atl	entire	17, 21, 108, 117, 120
<i>Quinqueloculina bidentata</i> d'Orbigny, 1839	ben	0–68	GMx, Carib, Atl, Pac	entire	21, 34, 41, 112, 138
<i>Quinqueloculina boschiana</i> d'Orbigny, 1839	ben	0–276	GMx, Carib, Atl	nw, ne, se	12, 17, 21, 119, 137
<i>Quinqueloculina boueana</i> d'Orbigny, 1846	ben	10–15	GMx, Atl, Pac	se	112

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Quinqueloculina bradyana</i> Cushman, 1917	ben	1–20	GMx, Carib, Atl, Pac	se, sw	34, 41, 112
<i>Quinqueloculina candeiana</i> d'Orbigny, 1839	ben	0–184	GMx, Carib, Atl, Pac	entire	89, 108, 112, 135
<i>Quinqueloculina catalinensis</i> Natland, 1938	ben	1–27	GMx, Atl, Pac	ne, sw	17, 108
<i>Quinqueloculina collumnosa</i> Cushman, 1922	ben	3–27	cosmopolitan	se, sw	18, 21, 41, 135
<i>Quinqueloculina compta</i> Cushman, 1947	ben	1–264	GMx, Carib, Atl, Pac	entire	17, 51, 108, 113, 135
<i>Quinqueloculina crassa subcuneata</i> Cushman, 1921	ben	2–86	cosmopolitan	ne, se, sw	21, 109, 132, 135
<i>Quinqueloculina dimidiata</i> Terquem, 1876	ben	16–428	GMx, Atl	nw	113, 114
<i>Quinqueloculina dutemplei</i> d'Orbigny, 1846	ben	4–36	GMx, Atl	ne	12, 17
<i>Quinqueloculina funafutiensis</i> (Chapman, 1900)	ben	0–36	cosmopolitan	entire	8, 87, 89, 108, 112
<i>Quinqueloculina garrettii</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Quinqueloculina impressa</i> Reuss, 1851	ben	2	GMx, Atl	nw	31
<i>Quinqueloculina jugosa</i> Cushman, 1944	ben	0–99	GMx, Atl, Pac	nw, ne, sw	12, 17, 110
<i>Quinqueloculina laevigata</i> d'Orbigny, 1839	ben	0–414	GMx, Carib, Atl, Pac	ne, se, sw	19, 21, 108, 112
<i>Quinqueloculina lamarckiana</i> d'Orbigny, 1839	ben	0–274	cosmopolitan	entire	21, 108, 117, 120
<i>Quinqueloculina limbata</i> d'Orbigny, 1905	ben	10–29	cosmopolitan	se	112
<i>Quinqueloculina parkeri</i> (Brady, 1881)	ben	1–46	cosmopolitan	se, sw	18, 41, 57, 112, 135
<i>Quinqueloculina poeyana</i> d'Orbigny, 1839	ben	0–110	cosmopolitan	entire	18, 21, 108, 112, 143
<i>Quinqueloculina polygona</i> d'Orbigny, 1839	ben	0–324	cosmopolitan	entire	21, 89, 109, 110, 112
<i>Quinqueloculina reticulata</i> Karrer, 1862	ben, itm	<1	GMx, Carib, Atl, Ind	se	154
<i>Quinqueloculina samoensis</i> Cushman, 1924	ben	0–10	GMx, Pac	sw	93
<i>Quinqueloculina sclerotica</i> Karrer, 1868	ben	9–324	GMx, Carib, Atl	se, sw	56, 57, 108, 109, 110
<i>Quinqueloculina seminulum</i> (Linné, 1758)	ben	0–83	cosmopolitan	entire	8, 19, 21, 142
<i>Quinqueloculina striata</i> d'Orbigny, 1826	ben	13–110	GMx, Atl, Ind	se	41, 112
<i>Quinqueloculina subarenaria</i> Cushman, 1917	ben	1–29	GMx, Pac	se	112
<i>Quinqueloculina subpoeyana</i> Cushman, 1922	ben	0–130	GMx, Carib, Atl	entire	8, 12, 21, 41, 112, 138
<i>Quinqueloculina subquadra</i> Hada, 1931	ben	13–25	GMx, Pac	nw	11
<i>Quinqueloculina tenagos</i> Parker, 1962	ben	0–110	cosmopolitan	entire	10, 12, 21, 89, 112 ²²
<i>Quinqueloculina tipswordi</i> Andersen, 1961	ben	18–43	GMx (endemic)	ne, se, sw	3, 108, 135
<i>Quinqueloculina tricarinata</i> d'Orbigny, 1839	ben	0–56	GMx, Carib, Atl, Pac	entire	21, 41, 51, 92, 108, 143
<i>Quinqueloculina tropicalis</i> Cushman, 1924	ben	<20	GMx, Carib, Pac, Ind, South	ne	111
<i>Quinqueloculina venusta</i> Karrer, 1868	ben, bab	693–3700	cosmopolitan	entire	35, 117, 119
<i>Quinqueloculina vulgaris</i> d'Orbigny, 1826	ben	1–221	cosmopolitan	entire	10, 21, 52, 143, 151
<i>Quinqueloculina weaveri</i> Rau, 1948	ben, bab	1373–2019	cosmopolitan	nw	119
<i>Quinqueloculina wiesneri</i> Parr, 1950	ben	0–238	GMx, Pac	entire	21, 108, 110, 125, 143
<i>Schlumbergerina alveoliniformis</i> (Brady, 1879)	ben	1–37	cosmopolitan	ne, se	18, 41, 104, 112
<i>Sigmohauerina bradyi</i> (Cushman, 1917)	ben	0–49	cosmopolitan	entire	21, 41, 56, 109, 137

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Sigmoilina sigmoidea</i> (Brady, 1884)	ben	11–1714	GMx, Carib, Atl	nw, sw	108, 119
<i>Sigmoilinita distorta</i> (Phleger & Parker, 1951)	ben	3–3488	GMx, Carib, Atl, Pac	entire	21, 103, 108, 119, 120
<i>Sigmoilinita elliptica</i> (Galloway & Wissler, 1927)	ben	87–1360	GMx, Pac	nw, ne	52, 53
<i>Sigmoilinita tenuis</i> (Czjzek, 1848)	ben	1–3237	cosmopolitan	entire	17, 108, 117, 140
<i>Sigmoilopsis flintii</i> (Cushman, 1946)	ben	11–324	GMx, w Atl	ne, sw	56, 108, 109, 110, 132
<i>Sigmoilopsis schlumbergeri</i> (Silvestri, 1904)	ben	1–3515	cosmopolitan	entire	21, 108, 119, 120
<i>Siphonaperta horrida</i> (Cushman, 1947)	ben	0–1020	GMx, Carib, Atl, Ind	nw, ne, sw	17, 21, 53, 108, 113
<i>Siphonaperta sabulosa</i> (Cushman, 1947)	ben	0–124	GMx, Carib, Atl, Pac	ne, se, sw	93, 105, 108, 117, 155
<i>Spirosigmoilina bradyi</i> Collins, 1958	ben	13–99	cosmopolitan	nw, se, sw	41, 109, 110, 137 ²³
<i>Triloculina affinis</i> d'Orbigny, 1852	ben	22–40	cosmopolitan	ne	12
<i>Triloculina bassensis</i> Parr, 1945	ben	0–40	GMx, Carib, Atl, Ind	nw, ne, se	21, 104, 137
<i>Triloculina bellatula</i> Bandy, 1956	ben	4–9	GMx (endemic)	ne	12
<i>Triloculina bermudezi</i> Acosta, 1940	ben	0–46	GMx, Carib, Atl, Pac	entire	21, 104, 137
<i>Triloculina bertheliniana</i> (Brady, 1884)	ben	37	cosmopolitan	se	18
<i>Triloculina bicarinata</i> d'Orbigny, 1839	ben	0–46	GMx, Carib, Atl, Ind	se, sw	18, 21, 41, 108, 112
<i>Triloculina brevidentata</i> Cushman, 1944	ben	14–18	GMx, Atl	nw, ne	22, 111, 151
<i>Triloculina brongiartiana</i> d'Orbigny, 1839	ben	2–110	GMx, Carib, Atl, South	se	18
<i>Triloculina carinata</i> d'Orbigny, 1839	ben	0–29	GMx, Carib, Atl	ne, se	17, 21, 41, 104, 112 ²⁴
<i>Triloculina fiterrei</i> Acosta, 1940	ben	0–216	GMx, Carib, Atl	entire	21, 56, 110, 118
<i>Triloculina gracilis</i> d'Orbigny, 1839	ben	4–158	GMx, Carib, Atl, Ind	se, sw	21, 34, 41, 112
<i>Triloculina linneiana</i> d'Orbigny, 1839	ben	0–65	cosmopolitan	entire	21, 51, 57, 92, 109, 138
<i>Triloculina planciana</i> d'Orbigny, 1839	ben	0–65	GMx, Carib, Atl, Pac	entire	21, 41, 51, 137
<i>Triloculina quadrilateralis</i> d'Orbigny, 1839	ben	0–27	GMx, Carib, Atl	ne, se, sw	41, 92, 108
<i>Triloculina rotunda</i> d'Orbigny, 1893	ben	0–110	cosmopolitan	nw, ne, se	18, 21, 41, 92, 137
<i>Triloculina sidebotomi</i> (Martinotti, 1921)	ben	0–34	cosmopolitan	nw, ne, se	17, 21, 87, 89
<i>Triloculina squamosa</i> Terquem, 1878	ben	2–56	GMx, Atl	nw, se	11, 21, 51, 151
<i>Triloculina striatotrigonula</i> Parr, 1941	ben	1–45	cosmopolitan	ne, se, sw	3, 17, 109, 111, 112 ²⁵
<i>Triloculina terquemiana</i> (Brady, 1884)	ben	15	cosmopolitan	se	112
<i>Triloculina transversistriata</i> (Brady, 1881)	ben	10–22	GMx, Carib, Pac, Ind	se	41, 112
<i>Triloculina tricarinata</i> d'Orbigny, 1826	ben	0–3251	cosmopolitan	entire	21, 41, 108, 117, 119
<i>Triloculina trigonula</i> (Lamarck, 1804)	ben	0–3250	cosmopolitan	entire	8, 21, 104, 112, 119
<i>Triloculinella dilatata</i> (d'Orbigny, 1839)	ben	18	GMx, Carib, Atl	se	18
<i>Triloculinella obliquinodus</i> Riccio, 1950	ben	1–351	cosmopolitan	entire	17, 21, 109, 143, 144 ²⁶
<i>Vertebrasigmoilina mexicana</i> (Cushman, 1922)	ben	0–93	GMx, Carib, Atl	entire	12, 21, 34, 82, 108, 112
Family: Riveroinidae					
<i>Pseudohauerina howelli</i> (Bermúdez, 1935)	ben	46	GMx, Pac	se	18, 98
<i>Pseudohauerina occidentalis</i> (Cushman, 1946)	ben	9–27	cosmopolitan	se	18, 41, 78, 112 ²⁷

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Family: Spiroloculinidae					
<i>Adelosina pulchella</i> d'Orbigny, 1846	ben	1	GMx, Carib, Atl, Pac, Arc	nw	143
<i>Spiroloculina antillarum</i> d'Orbigny, 1839	ben	0–181	cosmopolitan	entire	8, 11, 17, 41, 119
<i>Spiroloculina arenata</i> Cushman, 1921	ben	0–43	GMx, Carib, Atl	ne, se, sw	21, 22, 41, 108, 112
<i>Spiroloculina caduca</i> Cushman, 1922	ben	1–22	GMx, Carib, Atl	ne, se	21, 41, 112
<i>Spiroloculina communis</i> Cushman & Todd, 1944	ben	8–370	cosmopolitan	se, sw	21, 34, 56, 57, 108, 109
<i>Spiroloculina dentata</i> Cushman & Todd, 1944	ben	1–68	GMx, Atl, Pac	ne, sw	8, 17, 108
<i>Spiroloculina depressa</i> d'Orbigny, 1826	ben	20–139	cosmopolitan	ne, se, sw	12, 34, 51, 112
<i>Spiroloculina eximia</i> Cushman, 1922	ben	0–40	GMx, Carib	ne, se, sw	41, 105, 108
<i>Spiroloculina grateloupi</i> d'Orbigny, 1826	ben	10–50	cosmopolitan	se, sw	41, 110, 112
<i>Spiroloculina henbesti</i> Thalmann, 1955	ben	2–324	GMx, Carib, Atl, Pac	se, sw	21, 41, 56, 109, 110 ²⁸
<i>Spiroloculina manifesta</i> Cushman & Todd, 1944	ben	0–10	GMx, Pac, Ind	nw	89, 138
<i>Spiroloculina ornata</i> d'Orbigny, 1839	ben	1–216	GMx, Carib, Atl	se, sw	21, 41, 56, 57, 109, 112
<i>Spiroloculina poeyiana</i> d'Orbigny, 1839	ben	18	GMx, Carib	se	18
<i>Spiroloculina soldanii</i> Fornasini, 1886	ben	20–320	GMx, Atl	ne, se	103, 117, 135
Family: Tubinellidae					
<i>Articulina antillarum</i> Cushman, 1922	ben	9–48	GMx, Carib, Pac	se, sw	21, 41, 56, 110
<i>Articulina lineata</i> Brady, 1884	ben	1–59	GMx, Carib, Atl, Pac	ne, se, sw	21, 22, 41, 108
<i>Articulina mayori</i> Cushman, 1922	ben	2–63	GMx, Carib, Atl, Pac	entire	3, 21, 41, 108, 111, 113
<i>Articulina mucronata</i> (d'Orbigny, 1839)	ben	0–27	GMx, Carib, Atl, Ind	ne, se, sw	17, 20, 21, 56, 57, 109
<i>Articulina multilocularis</i> Brady, Parker, & Jones, 1888	ben	0–4	GMx, sw Atl	se	21
<i>Articulina pacifica</i> Cushman, 1944	ben	0–67	cosmopolitan	ne, se, sw	21, 34, 108, 135
<i>Articulina sagra</i> d'Orbigny, 1839	ben	0–128	GMx, Carib, Atl, Ind	entire	12, 21, 108, 137, 154
<i>Tubinella funalis</i> (Brady, 1884)	ben	16–171	cosmopolitan	nw, se, sw	18, 108, 137
Superfamily: Nubeculariacea					
Family: Fischerinidae					
<i>Fischerinella dubia</i> (d'Orbigny, 1839)	ben	11–46	GMx, Carib, Atl	se	18, 41
<i>Nodobaculariella atlantica</i> Cushman & Hanzawa, 1937	ben	3–171	GMx, Carib, Atl, Pac	nw, ne, sw	12, 17, 82, 108
<i>Nodobaculariella cassis</i> (d'Orbigny, 1839)	ben	0–324	GMx, Carib, Atl, Pac	entire	21, 34, 109, 113, 117
<i>Nodobaculariella striata</i> (d'Orbigny, 1826)	ben	15	cosmopolitan	se	112
<i>Wiesnerella auriculata</i> (Egger, 1893)	ben	2–238	cosmopolitan	entire	17, 18, 34, 54, 56, 109
Family: Nubeculariidae					
<i>Calcutuba polymorpha</i> von Roboz, 1884	ben, ses	1	GMx, Carib, Atl, Pac	nw, ne	6 ²⁹
<i>Cornuspiramia antillarum</i> (Cushman, 1922)	ben, ses	shallow	GMx, Carib	se	41, 44
<i>Nodophthalmidium simplex</i> Cushman & Todd, 1944	ben	22–27	GMx, Carib, Pac, Ind	se	18, 41
<i>Nubecularia lucifuga</i> Defrance, 1825	ben, ses	46	cosmopolitan	se	18

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
Family: Ophthalmitidae					
<i>Cornuloculina inconstans</i> (Brady, 1879)	ben	0–2520	cosmopolitan	entire	17, 21, 35, 52
<i>Edentostomina cultrata</i> (Brady, 1881)	ben	0–34	cosmopolitan	nw, ne, se	17, 87, 89, 112
Superfamily: Soritacea					
Family: Peneroplidae					
<i>Coscinospira acicularis</i> (Batsch, 1791)	ben, esb	0–11	cosmopolitan	se	21, 41 ³⁰
<i>Coscinospira arietina</i> (Batsch, 1791)	ben, esb	1–64	cosmopolitan	ne, se	21, 45, 51
<i>Laevipeneroplis bradyi</i> (Cushman, 1930)	ben, esb	1–65	GMx, Carib, Atl	ne, se, sw	21, 45, 57, 71, 108, 109
<i>Laevipeneroplis discoideus</i> (Flint, 1899)	ben, esb	1–175	GMx, Carib, Atl	nw, se, sw	45, 57, 82, 109
<i>Laevipeneroplis laevigatus</i> (Karrer, 1868)	ben, esb	1	GMx, w Atl	se	112
<i>Laevipeneroplis proteus</i> (d'Orbigny, 1839)	ben, esb	0–34	GMx, Carib, Atl, Pac	entire	41, 71, 108, 113, 135
<i>Monalysidium politum</i> (Chapman, 1900)	ben	3–46	cosmopolitan	ne, se, sw	17, 18, 21, 108
<i>Peneroplis carinatus</i> d'Orbigny, 1839	ben, esb	0–34	GMx, Carib, Atl, Ind	entire	21, 41, 56, 112
<i>Peneroplis pertusus</i> (Forskål, 1775)	ben, esb	0–110	cosmopolitan	ne, se, sw	17, 21, 108, 112
Family: Soritidae					
<i>Amphisorus hemprichii</i> Ehrenberg, 1840	ben, esb	1–64	cosmopolitan	ne, se, sw	45, 91, 108
<i>Androsina lucasi</i> Levy, 1977	ben, esb, itm	0–1	GMx, Carib, Atl	ne, se	71
<i>Archaias angulatus</i> (Fichtel & Moll, 1798)	ben, esb	0–59	cosmopolitan	ne, se, sw	21, 45, 71, 92, 108, 135
<i>Cyclorbiculina compressa</i> (d'Orbigny, 1839)	ben, esb	0–73	GMx, Carib, Atl	entire	17, 21, 36, 45, 71, 130
<i>Parasorites marginalis</i> (Lamarck, 1816)	ben, esb	0–110	cosmopolitan	ne, se, sw	20, 21, 45, 92, 108, 112
<i>Parasorites orbitolitoideus</i> (Hofker, 1930)	ben, esb	0–85	GMx, Carib, Atl, Pac	nw, ne, se	3, 11, 12, 21, 71, 82
Order: Carterinida					
Family: Carterinidae					
<i>Carterina spiculotesta</i> (Carter, 1877)	ben	11–99	cosmopolitan	entire	22, 41, 108, 137
Order: Spirillinida					
Family: Patellinidae					
<i>Patellina corrugata</i> Williamson, 1858	ben	15–562	cosmopolitan	entire	3, 18, 56, 110, 137 ^{31, 32}
Family: Spirillinidae					
<i>Mychostomina lucida</i> (Sidebottom, 1908)	ben	27	GMx, Atl, Ind	se	18
<i>Spirillina decorata</i> Brady, 1884	ben	14–171	cosmopolitan	entire	18, 22, 109, 137, 151
<i>Spirillina denticulata</i> Brady, 1884	ben	15–110	cosmopolitan	ne, se	18, 21
<i>Spirillina obconica</i> Brady, 1879	ben	19	GMx, Atl, Pac, South	ne	21
<i>Spirillina ornata</i> Sidebottom, 1908	ben	27	GMx, Carib, Atl, Ind	nw, ne, se	18, 22, 130
<i>Spirillina tuberculatolimbata</i> Chapman, 1900	ben	110	GMx, Pac, Ind	se	18
<i>Spirillina vivipara</i> Ehrenberg, 1843	ben	0–1481	cosmopolitan	entire	8, 89, 112, 117, 119
Order: Lagenida					
Superfamily: Nodosariacea					
Family: Lagenidae					
<i>Lagena alticostata</i> Cushman, 1913	ben, bab	550–1314	GMx, w Pac	nw, ne	52
<i>Lagena ampulladistoma</i> (Rymer-Jones, 1874)	ben	46	cosmopolitan	se	18

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Lagena halstedii</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Lagena hispida</i> Reuss, 1863	ben, bab	381–1695	GMx, Carib, Atl, Pac, South	nw	52, 140
<i>Lagena hispidula</i> Cushman, 1913	ben	22–1314	GMx, Carib, Atl, Pac	nw, ne, sw	52, 56, 108, 109, 110
<i>Lagena hoeglundi</i> Todd & Brönnimann, 1957	ben	472–853	GMx, Carib	nw, ne	52
<i>Lagena interrupta</i> Williamson, 1848	ben, bab	472–671	GMx, Atl, Pac, South	nw	52
<i>Lagena inusitata</i> Andersen, 1961	ben	68	GMx, Carib	ne, sw	3, 56
<i>Lagena laevis</i> (Montagu, 1803)	ben	11–3515	cosmopolitan	nw, ne, sw	108, 119 ³³
<i>Lagena mexicana</i> Andersen, 1961	ben	56–576	GMx, Carib	nw, ne, sw	3, 108, 148
<i>Lagena nebulosa</i> Cushman, 1923	ben	36–1241	cosmopolitan	nw, ne, sw	3, 52, 56, 109
<i>Lagena neodesmorpha</i> McCulloch, 1981	ben, bab	412–579	GMx, Carib	nw	52
<i>Lagena ollula</i> Buchner, 1940	ben, bab	311	GMx (fossils in Europe)	nw	52
<i>Lagena perlucida</i> (Montagu, 1803)	ben	46	cosmopolitan	se	18
<i>Lagena semistriata</i> Williamson, 1848	ben	unknown	GMx, Carib, Atl, Pac	ne	22
<i>Lagena sesquistriata</i> Bagg, 1912	ben	226–835	GMx, e Pac	ne	52
<i>Lagena setigera</i> Millet, 1901	ben	197–252	GMx, w Pac	nw, ne	52
<i>Lagena simplex</i> (Reuss, 1851)	ben	122–1361	GMx (fossils in Europe)	nw, ne	52
<i>Lagena spicata</i> Cushman & McCulloch, 1950	ben	13–270	cosmopolitan	ne, sw	3, 56, 95, 108, 110
<i>Lagena spirata</i> Bandy, 1949	ben	91	GMx, Ind	nw, ne	3, 52
<i>Lagena striata</i> (d'Orbigny, 1839)	ben	22–1360	GMx, Carib, Atl, Pac, South	entire	21, 52, 56, 109, 140
<i>Lagena sublagenoides</i> Cushman, 1913	ben, bab	384–635	GMx, Carib, Pac	ne	42
<i>Lagena sulcata</i> (Walker & Jacob, 1798)	ben	47–933	GMx, Carib, Atl, Pac, South	nw, ne, sw	108, 110, 119, 140
<i>Lagena wiesneri</i> Parr, 1950	ben, bab	812–1055	GMx, Ind, South	nw, ne	52
<i>Procerolagena gracilis</i> (Williamson, 1848)	ben	108–934	GMx, Carib, Atl, Pac, South	nw, ne, sw	52, 108, 119 ³⁴
<i>Procerolagena gracillima</i> (Seguenza, 1862)	ben	58–1326	GMx, Atl, Pac, South	nw, ne, sw	52, 56, 109, 119
<i>Procerolagena mollis</i> (Cushman, 1944)	ben	58–1361	GMx, Atl	nw, ne, sw	34, 52
<i>Procerolagena purii</i> (Andersen, 1961)	ben	shelf	GMx (endemic)	ne	3, 132
Family: Nodosariidae					
<i>Alfredosilvestris levinsoni</i> Andersen, 1961	ben	105–550	GMx, Carib	nw, ne	3, 37, 52, 54, 132, 148
<i>Dentalina albatrossi</i> (Cushman, 1923)	ben	19–1034	GMx, Carib, Atl, Pac	entire	21, 42, 52, 108
<i>Dentalina ariana</i> Patterson & Pettis, 1986	ben, bab	188–3488	GMx, Atl, Pac	nw, ne	52, 119 ³⁵
<i>Dentalina bradyensis</i> (Dervieux, 1894)	ben	152–945	cosmopolitan	nw, ne	119, 140 ³⁶
<i>Dentalina cuvieri</i> (d'Orbigny, 1826)	ben, bab	181–3250	GMx, Atl	nw, ne	119
<i>Dentalina flintii</i> (Cushman, 1923)	ben	19–3550	GMx, Carib, Atl, Pac	nw, ne, se	21, 42, 76
<i>Dentalina subemaciata</i> Parr, 1950	ben, bab	309–613	cosmopolitan	ne	42 ³⁷
<i>Dentalina subsoluta</i> (Cushman, 1923)	ben, bab	518–1335	GMx, Carib, Atl, Pac	nw, ne	42, 52

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Frondicularia compressa</i> Costa, 1855	ben, mul	unknown	GMx (fossils in Europe, Carib)	ne	3
<i>Frondicularia sagittula</i> van den Broeck, 1876	ben	19–384	GMx, Carib, Atl	entire	21, 36, 42, 113
<i>Grigelis orectus</i> Loeblich & Tappan, 1994	ben, bab	181–938	cosmopolitan	nw	119 ³⁸
<i>Grigelis pyrula</i> (d'Orbigny, 1826)	ben	40–1720	GMx, Carib, Atl, Pac	entire	21, 34, 42, 52, 110, 120
<i>Laevidentalina advena</i> (Cushman, 1923)	ben, bab	305–1335	GMx, Carib, Atl, Pac	ne, se	42, 52
<i>Laevidentalina aphelis</i> Loeblich & Tappan, 1986	ben	2–3488	cosmopolitan	entire	21, 56, 82, 97, 119 ³⁹
<i>Laevidentalina atlantica</i> (Cushman, 1923)	ben, bab	184–309	GMx, Carib, Atl	nw, ne, sw	42, 52, 108
<i>Laevidentalina filiformis</i> (d'Orbigny, 1826)	ben	19–853	cosmopolitan	entire	21, 52, 108, 119
<i>Lingulina carinata</i> d'Orbigny, 1826	ben	32–111	GMx, Carib, Atl	ne	12, 56
<i>Lingulina seminuda</i> Hantken, 1875	ben, bab	168–966	GMx, Carib, Atl, Pac	nw, ne	42, 52, 119
<i>Nodosaria catesbyi</i> d'Orbigny, 1839	ben	46	GMx, Carib, Ind	ne, se	18, 111
<i>Nodosaria fusta</i> Cushman & Todd, 1945	ben	52–98	GMx (fossils in Carib)	nw, ne, sw	3, 34, 95
<i>Nodosaria lamnulifera</i> Thalmann, 1950	ben, bab	232–646	GMx, Pac	nw, ne	119
<i>Nodosaria rugosa</i> d'Orbigny, 1839	ben	46	GMx, Carib	se	18
<i>Plectofrondicularia advena</i> (Cushman, 1923)	ben	123–1073	GMx, Atl, Pac	nw, ne	52
<i>Pseudoglandulina comatula</i> (Cushman, 1923)	ben	47–950	cosmopolitan	nw, ne, sw	42, 108, 114, 117, 120
<i>Pseudonodosaria torrida</i> (Cushman, 1923)	ben	95–1067	GMx, Carib, Atl	nw, ne, se	21, 42, 90
Family: Vaginulinidae					
<i>Amphicoryna camachoi</i> Andersen, 1961	ben	29–65	GMx (endemic)	ne, sw	3, 108, 109
<i>Amphicoryna hirsuta</i> (d'Orbigny, 1826)	ben	19–1020	GMx, Atl, Pac	entire	21, 54, 78, 108, 113 ⁴⁰
<i>Amphicoryna intercellularis</i> (Brady, 1881)	ben	110–274	GMx, Carib, Atl	se, sw	36, 112
<i>Amphicoryna roedereri</i> Andersen, 1961	ben	58–770	GMx (endemic)	nw, ne, sw	3, 52, 54, 108
<i>Amphicoryna scalaris</i> (Batsch, 1791)	ben	19–414	GMx, Atl, Pac, South	ne, se, sw	12, 21, 22, 56, 109, 162
<i>Amphicoryna separans</i> (Brady, 1884)	ben	unknown	GMx, Pac, Ind	ne	22
<i>Amphicoryna sublineata</i> (Brady, 1884)	ben	45–3400	GMx, Atl, Ind	nw, ne	42, 119, 120
<i>Astacolus albatrossi</i> (Cushman, 1923)	ben, bab	373–1335	GMx, Carib, Atl, Arc, South	ne, se	42
<i>Astacolus crepidulus</i> (Fichtel & Moll, 1798)	ben	110–3632	cosmopolitan	ne, se, sw	22, 42, 76, 112
<i>Astacolus limbata</i> (Flint, 1899)	ben, bab	309–384	GMx, w Atl	ne	42
<i>Astacolus ovatus</i> Galloway & Heminway, 1941	ben	71–183	GMx (fossils in Carib)	ne	12
<i>Lenticulina antillea</i> (Cushman, 1923)	ben, bab	384	GMx, Carib, Atl	ne	42
<i>Lenticulina atlantica</i> (Barker, 1960)	ben, bab	226–409	GMx, Carib, Atl	nw, ne	52
<i>Lenticulina bowdenensis</i> Cushman, 1919	ben	75–122	GMx, Carib	nw	52, 95
<i>Lenticulina calcar</i> (Linné, 1758)	ben	16–1714	cosmopolitan	entire	12, 21, 34, 56, 108, 119
<i>Lenticulina clericii</i> (Fornasini, 1895)	ben	152–823	GMx (fossils in Europe)	nw, ne	52, 148
<i>Lenticulina convergens</i> (Bornemann, 1855)	ben	110–918	GMx, Carib, Atl, Pac	nw, ne, se	42, 52, 112

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Lenticulina cultrata</i> (de Montfort, 1808)	ben	99–1644	GMx, Carib, Atl, Pac, South	nw, ne, sw	52, 108, 119
<i>Lenticulina formosa</i> (Cushman, 1923)	ben, bab	384	GMx, Carib, Pac	ne	42
<i>Lenticulina gibba</i> (d'Orbigny, 1839)	ben	152–2441	GMx, Carib, Atl, Pac, South	nw, ne, se	42, 52, 119, 141
<i>Lenticulina iota</i> (Cushman, 1923)	ben	25–1020	GMx, Carib, Atl, Pac	nw, ne, se	21, 42, 52, 113
<i>Lenticulina lowmani</i> (Andersen, 1961)	ben	36–966	GMx, w Atl	entire	42, 52, 56, 109, 112 ⁴¹
<i>Lenticulina orbicularis</i> (d'Orbigny, 1826)	ben	110–830	cosmopolitan	nw, ne, se	52, 112, 119
<i>Lenticulina septentrionalis</i> (Cushman, 1923)	ben, bab	533	GMx, nw Atl	nw	52
<i>Lenticulina serpens</i> (Seguenza, 1880)	ben, bab	216–610	GMx, e Atl	nw, sw	52, 108
<i>Lenticulina submamilligera</i> (Cushman, 1917)	ben	124	GMx, Atl, Pac	ne	42
<i>Lenticulina suborbicularis</i> Parr, 1950	ben	32–81	GMx, Pac, Ind	ne	12
<i>Lenticulina thalmani</i> (Hessland, 1943)	ben, bab	358–587	GMx, Carib, Atl, Pac	nw, ne	42, 78, 148 ⁴²
<i>Lenticulina torrida</i> (Cushman, 1923)	ben	110–960	GMx, Carib, Atl	ne, se	42, 112
<i>Marginulina advena</i> (Cushman, 1923)	ben	30–157	GMx, Carib, Atl	ne, se	12, 42, 112
<i>Marginulina bacheii</i> Bailey, 1851	ben	110	GMx, Atl, Pac	se	112
<i>Marginulina costata</i> (Batsch, 1791)	ben	110	GMx, Atl	se	112
<i>Marginulina glabra obesa</i> Cushman, 1923	ben	80–1067	cosmopolitan	nw, ne, sw	42, 52, 90, 108, 133 ⁴³
<i>Marginulina hantkeni</i> Bandy, 1949	ben	79–373	GMx (fossils in Alaska & Europe)	nw, ne	12, 119
<i>Marginulina striatula</i> Cushman, 1913	ben, bab	305–415	GMx, Carib, Atl, Pac	nw, ne	42, 52
<i>Marginulina villa</i> Cushman, 1947	ben	53–366	GMx, Carib, Atl	nw, ne, sw	3, 22, 34, 52, 54
<i>Marginulinopsis bradyi</i> (Goës, 1894)	ben	88–144	GMx, Carib, Atl, Pac, Arc	ne	12, 78 ⁴⁴
<i>Marginulinopsis marginulinoides</i> (Goës, 1896)	ben	17–640	GMx, Carib, Atl	nw, ne, sw	34, 113, 117, 119, 162
<i>Neolenticulina peregrina</i> (Schwager, 1866)	ben	8–3017	cosmopolitan	entire	21, 34, 35, 56, 76, 117
<i>Planularia magnifica falciformis</i> Thalmann, 1937	ben, bab	1067	GMx, Atl, Pac	nw	78, 90
<i>Saracenaria ampla</i> Cushman & Todd, 1945	ben	68–351	GMx, Carib	ne, sw	3, 12, 108
<i>Saracenaria italica</i> Defrance, 1824	ben	110–373	cosmopolitan	nw, ne, se	42, 119, 154
<i>Saracenaria lamptoni</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Saracenaria latifrons</i> (Brady, 1884)	ben	95–457	GMx, Carib, Atl, Pac	entire	3, 21, 42, 52, 56
<i>Saracenaria mexicana</i> Andersen, 1961	ben	16–414	GMx (endemic)	ne, sw	3, 34, 56, 108, 109
<i>Vaginulina americana</i> Cushman, 1923	ben	29–110	GMx, Carib, Atl	se	112 ⁴⁵
<i>Vaginulinopsis obtusata</i> (Reuss, 1870)	ben, bab	320–533	GMx (fossils in Europe)	nw	52
<i>Vaginulinopsis planatus</i> (Phleger & Parker, 1951)	ben	16–122	GMx, Carib, Atl, Arc	entire	21, 34, 52, 56, 110, 120
<i>Vaginulinopsis reniformis</i> (d'Orbigny, 1846)	ben	95–2215	GMx, Carib, Atl, Pac	nw, se	21, 141
<i>Vaginulinopsis subaculeata</i> (Cushman, 1923)	ben	16–851	GMx, Carib, Atl	nw, ne, sw	36, 42, 52, 56, 110, 119
<i>Vaginulinopsis sublegumen</i> Parr, 1950	ben, bab	613–1067	cosmopolitan	nw, ne	42, 90 ⁴⁶
<i>Vaginulinopsis tenuis</i> (Bornemann, 1855)	ben, bab	181–468	GMx, Pac, Ind	nw	119

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Superfamily: Polymorphinacea					
Family: Ellipsolagenidae					
<i>Cushmanina feildeniana</i> (Brady, 1878)	ben, bab	934	GMx, Pac, Arc, South	nw	140
<i>Cushmanina spiralis</i> (Brady, 1884)	ben	35	GMx, Carib, Pac, Ind	nw	137
<i>Cushmanina striatopunctata</i> (Parker & Jones, 1865)	ben	165–184	cosmopolitan	sw	56, 78, 110
<i>Fissurina alatifundata</i> McCulloch, 1981	ben, bab	267–1314	GMx, Carib	nw, ne	52
<i>Fissurina aradasii</i> Seguenza, 1862	ben, bab	1373–2019	GMx (fossils in Europe)	nw	119
<i>Fissurina biancae</i> Seguenza, 1862	ben, bab	421–1314	GMx, South	nw, ne	52
<i>Fissurina bifida</i> (Heron-Allen & Earland, 1924)	ben, bab	466–1000	GMx (fossils in Australia)	nw, ne	52
<i>Fissurina castanea</i> (Flint, 1899)	ben, bab	421–928	GMx, Carib	nw, ne	52
<i>Fissurina cushmani</i> (Wiesner, 1931)	ben, bab	625–823	GMx, South	nw, ne	52
<i>Fissurina flintiana</i> (Cushman, 1923)	ben, bab	488–2432	GMx, Carib	nw, ne	42, 52, 53
<i>Fissurina formosa</i> (Schwager, 1866)	ben, bab	556–3250	GMx, Pac, South	nw, ne	119
<i>Fissurina lacunata</i> (Burrows & Holland, 1895)	ben	27–81	GMx, Carib, Atl	sw	108, 109
<i>Fissurina laevigata</i> Reuss, 1850	ben	9–1360	GMx, Atl, Pac, Arc	nw, ne, sw	52, 108, 140
<i>Fissurina lagenoides</i> (Williamson, 1858)	ben, bab	216–1360	GMx, Carib, Atl, Pac, South	nw, ne, sw	52, 108
<i>Fissurina longispina</i> (Brady, 1881)	ben, bab	664–1714	cosmopolitan	nw, ne	42, 90, 119
<i>Fissurina lucida</i> (Williamson, 1848)	ben	11–966	cosmopolitan	entire	18, 52, 108
<i>Fissurina marginata</i> (Montagu, 1803)	ben	14–1361	GMx, Carib, Atl, Pac, Arc, South	nw, ne, sw	52, 56, 108, 109, 110
<i>Fissurina marginatoperforata</i> (Seguenza, 1880)	ben	16–351	cosmopolitan	se, sw	18, 56, 108, 109, 110
<i>Fissurina milletti</i> Todd, 1954	ben	87–966	GMx, Carib, Pac, Ind	nw, ne	52
<i>Fissurina neptuni</i> (Buchner, 1940)	ben, bab	320–579	GMx, Atl	nw	52
<i>Fissurina orbicarinata</i> McCulloch, 1981	ben	381	GMx, Carib	nw	52
<i>Fissurina orbignyana</i> Seguenza, 1862	ben	16–1695	GMx, Carib, Atl, Pac, South	nw, se, sw	18, 108, 119, 140
<i>Fissurina radiata</i> Seguenza, 1862	ben, bab	347–1204	GMx (fossils in Europe)	nw, ne	52, 53
<i>Fissurina schwageriana</i> (Cushman, 1931)	ben, bab	1360	GMx (fossils in s Pac)	nw	52
<i>Fissurina spinosa</i> (Sidebottom, 1912)	ben	18	GMx, Pac	se	18 ⁴⁷
<i>Fissurina submarginata</i> (Boomgaard, 1949)	ben	19–933	cosmopolitan	nw, ne	21, 42, 137, 140
<i>Fissurina tenuissima</i> Seguenza, 1862	ben	122–3515	GMx (fossils in Europe)	nw, ne	52, 119
<i>Oolina apiopleura</i> (Loeblich & Tappan, 1953)	ben	82–1067	GMx, Carib, Atl, Pac, Arc	nw, ne, se	42, 90, 119 ⁴⁸
<i>Oolina caudigera</i> (Wiesner, 1931)	ben	52–105	cosmopolitan	ne, sw	3, 34
<i>Oolina globosa</i> (Montagu, 1803)	ben	91–2215	GMx, Carib, Atl, Pac, South	nw, ne, sw	36, 52, 141
<i>Oolina hexagona</i> (Williamson, 1848)	ben	14–2451	cosmopolitan	nw, ne, sw	36, 52, 56, 109, 110
<i>Oolina melo</i> d'Orbigny, 1839	ben	52–93	GMx, Carib, Atl, Pac, Arc	ne, sw	3, 22, 34
<i>Oolina ovum</i> (Ehrenberg, 1843)	ben, bab	404–812	GMx, Atl, Pac	nw	52

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Oolina squamosa</i> (Montagu, 1803)	ben	110	GMx, Carib, Atl, Pac	se	78, 112
<i>Parafissurina botelliformis</i> (Brady, 1881)	ben, bab	577–1360	GMx, Atl, Ind, South	nw	52, 53, 78
<i>Parafissurina felsinea</i> (Fornasini, 1894)	ben, bab	2215	GMx, Atl, Pac	nw	141
<i>Parafissurina lateralis</i> (Cushman, 1913)	ben	36–3250	cosmopolitan	nw, ne, sw	34, 52, 108, 109, 119
<i>Parafissurina malcomsonii</i> (Wright, 1911)	ben, bab	586–1055	GMx (fossils in Europe)	nw, ne, sw	52 ⁴⁹
<i>Parafissurina pseudomarginata</i> (Buchner, 1940)	ben	1110	GMx, Atl	ne	52
Family: Glandulinidae					
<i>Glandulina ovula</i> d'Orbigny, 1846	ben	21–1247	cosmopolitan	entire	78, 108, 113, 119 ⁵⁰
<i>Laryngosigma lactea</i> (Walker & Jacob, 1798)	ben	16–414	GMx, Carib, Atl, Pac	ne, se, sw	41, 108, 111
<i>Seabrookia earlandi</i> (Wright, 1891)	ben	11–3218	cosmopolitan	nw, ne, sw	52, 108, 117, 124
Family: Polymorphinidae					
<i>Francuscia extensa</i> (Cushman, 1923)	ben, bab	1792–3515	cosmopolitan	nw, ne	119
<i>Globulina aequalis</i> d'Orbigny, 1846	ben	29–635	GMx, Atl	ne, sw	42, 108
<i>Globulina gibba</i> (Deshayes, 1830)	ben	2–3270	cosmopolitan	entire	34, 56, 57, 78, 119, 143
<i>Globulina regina</i> (Brady, Parker, & Jones, 1870)	ben	9–56	cosmopolitan	se, sw	18, 34, 51
<i>Guttulina australis</i> d'Orbigny, 1839	ben	1–216	GMx, Carib, Atl, Pac	entire	21, 34, 56, 117, 143 ⁵¹
<i>Guttulina communis</i> (d'Orbigny, 1826)	ben	2–132	cosmopolitan	nw, se, sw	56, 73, 109, 112, 143 ⁵²
<i>Guttulina hirsuta</i> (Brady, Parker, & Jones, 1870)	ben	unknown	GMx, Carib	ne	22
<i>Guttulina laevis</i> de Pourtales, 1850	ben	unknown	GMx, w Atl	ne	22
<i>Guttulina oblonga</i> d'Orbigny, 1846	ben	15	GMx, n Atl	se	112
<i>Guttulina pulchella</i> d'Orbigny, 1839	ben	2–238	GMx, Carib, Atl	entire	12, 41, 56, 109, 115
<i>Guttulina spicaeformis</i> (Roemer, 1838)	ben	16–118	GMx, Carib, Atl, Pac	entire	3, 49, 52, 108, 137
<i>Guttulina vittrea</i> d'Orbigny, 1839	ben	46	GMx, Carib	se	18
<i>Pyrulina angusta</i> (Egger, 1857)	ben, bab	1827–3515	cosmopolitan	nw, ne	37, 119
<i>Ramulina globulifera</i> Brady, 1879	ben	87–1067	cosmopolitan	nw, ne, sw	52, 90, 108, 119
<i>Sigmomorphina pearceyi</i> Cushman & Ozawa, 1930	ben	27	GMx, Atl	se	18
<i>Vasiglobulina reticulata</i> Poag, 1982	ben, ses	12–61	GMx, Carib, Atl	ne, se	117, 136 ⁵³
Order: Buliminida					
Superfamily: Buliminacea					
Family: Bolivinitidae					
<i>Abditodentrix pseudothalmani</i> (Boltovskoy & Giussani de Kahn, 1981)	ben, bab	229–1360	GMx, Atl, Pac	nw, ne	52, 53, 54
<i>Bolivina alata</i> (Seguenza, 1862)	ben	92–3640	cosmopolitan	entire	34, 35, 40, 52, 53, 162
<i>Bolivina albatrossi</i> Cushman, 1922	ben	8–3550	GMx, Carib, Atl, Pac	entire	34, 35, 56, 76, 117, 120
<i>Bolivina barbata</i> Phleger & Parker, 1951	ben	13–2881	GMx, Carib, Pac	nw, ne, sw	19, 53, 76, 108, 120
<i>Bolivina compacta</i> Sidebottom, 1905	ben	11–13	cosmopolitan	se	41
<i>Bolivina daggarius</i> Parker, 1955	ben	1–3283	GMx, Carib	entire	12, 21, 63, 117, 135

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Bolivina earlandi</i> Parr, 1950	ben, bab	692–2238	GMx, Carib, Atl, South	nw	141
<i>Bolivina fragilis</i> Phleger & Parker, 1951	ben	1–3360	GMx, w Atl	entire	21, 35, 56, 76, 108, 124
<i>Bolivina goesii</i> Cushman, 1922	ben	9–2560	GMx, Carib, Atl	entire	34, 35, 40, 117, 119
<i>Bolivina gramen</i> (d'Orbigny, 1839)	ben	46	GMx, Carib, Atl	se	18
<i>Bolivina hastata</i> Phleger & Parker, 1951	ben	1–2950	GMx, Carib	entire	17, 21, 34, 35, 54, 120
<i>Bolivina imporcata</i> Cushman & Todd, 1945	ben, bab	457	GMx (fossils in Carib)	nw	52
<i>Bolivina inflata</i> Heron-Allen & Earland, 1913	ben	1–6	GMx, Carib, Atl	ne, se	17, 21
<i>Bolivina lowmani</i> Phleger & Parker, 1951	ben, mpl	0–3632	GMx, Carib, Atl, Pac	entire	21, 33, 76, 142, 147
<i>Bolivina minima</i> Phleger & Parker, 1951	ben	11–3250	GMx, Carib	nw, ne, sw	35, 108, 117, 119, 120
<i>Bolivina ordinaria</i> Phleger & Parker, 1952	ben	18–3164	GMx, Atl	nw, ne, sw	52, 108, 117, 119, 130
<i>Bolivina paula</i> Cushman & Cahill, 1932	ben	0–3283	GMx, Carib, Atl, Pac	nw, ne, se	21, 76, 117, 123
<i>Bolivina pseudoplicata</i> Heron-Allen & Earland, 1930	ben	2–3190	cosmopolitan	nw, ne, sw	52, 119, 125
<i>Bolivina pseudopunctata</i> Höglund, 1947	ben	<1	GMx, Carib, Atl, South	nw	142
<i>Bolivina punctata</i> d'Orbigny, 1839	ben	10–613	cosmopolitan	ne, se	40, 51
<i>Bolivina pusilla</i> Schwager, 1866	ben	71–3550	GMx, Atl, Pac	nw, ne	52, 54, 76, 117, 119
<i>Bolivina quadrata</i> Cushman & McCulloch, 1942	ben	181–1900	GMx, e Pac	nw, ne	119
<i>Bolivina seminuda</i> Cushman, 1911	ben, bab	1373–1565	GMx, Pac, South	nw	119
<i>Bolivina spathulata</i> (Williamson, 1858)	ben	4–110	cosmopolitan	ne, se	17, 112 ⁵⁴
<i>Bolivina striatula</i> Cushman, 1922	ben	1–324	cosmopolitan	entire	34, 41, 52, 144, 158
<i>Bolivina striatula spinata</i> Cushman, 1936	ben	2–2469	GMx, Carib, Atl	nw, ne, sw	19, 36, 117, 135, 158 ⁵⁵
<i>Bolivina subaenariensis</i> Cushman, 1922	ben	2–3292	GMx, Carib, Atl, Pac	entire	21, 108, 117, 119 ⁵⁶
<i>Bolivina subspinescens</i> Cushman, 1922	ben	2–3488	cosmopolitan	entire	21, 36, 117, 119, 120
<i>Bolivina variabilis</i> (Williamson, 1858)	ben	2–184	cosmopolitan	ne, sw	108, 125
<i>Bolivina venezuelana</i> Sellier de Civrieux, 1976	ben	35	GMx, Carib	ne	132
<i>Bolivinellina translucens</i> Phleger & Parker, 1951	ben	10–3640	GMx, Carib, Atl, Ind	entire	35, 52, 113, 117, 119
<i>Bolivinina abrupta</i> (Phleger & Parker, 1952)	ben	2–3218	GMx, Atl	entire	21, 54, 108, 117, 140
<i>Bolivinina quadrilatera</i> (Schwager, 1866)	ben, bab	2092	cosmopolitan	ne	119
<i>Bolivinina rhomboidalis</i> (Millett, 1899)	ben	9–110	cosmopolitan	ne, se, sw	18, 22, 41, 108
<i>Brizalina alvarezi</i> (Sellier de Civrieux, 1976)	ben	26–40	GMx, Carib, Pac, Ind	nw	137
<i>Brizalina merecuanai</i> (Sellier de Civrieux, 1976)	ben	37	GMx, Carib	nw	137
<i>Parabrizalina porrecta</i> (Brady, 1881)	ben	24	GMx, Carib, Atl, Ind	ne, se	21, 22, 78
Family: Buliminidae					
<i>Bulimina aculeata</i> d'Orbigny, 1826	ben	55–3200	cosmopolitan	entire	34, 35, 40, 117, 120
<i>Bulimina alazanensis</i> Cushman, 1927	ben	42–3640	cosmopolitan	entire	35, 110, 117, 120, 135
<i>Bulimina barbata</i> Cushman, 1927	ben	36–375	GMx, e Pac	ne, sw	56, 119

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Bulimina buchiana</i> d'Orbigny, 1846	ben, bab	613–635	GMx, Carib, Atl, South	ne	40
<i>Bulimina marginata</i> d'Orbigny, 1826	ben	2–2950	cosmopolitan	entire	35, 40, 53, 119, 158
<i>Bulimina mexicana</i> Cushman, 1922	ben	22–3017	GMx, Carib, Atl, Pac	entire	36, 40, 117, 119, 120
<i>Bulimina spicata</i> Phleger & Parker, 1951	ben	11–3237	GMx, Carib, Atl	entire	53, 108, 117, 119, 120
<i>Bulimina tenuis</i> Phleger & Parker, 1951	ben	13–265	GMx, Carib	nw, ne, sw	52, 82, 108, 120, 124
<i>Buliminella elegantissima</i> (d'Orbigny, 1839)	ben	0–357	cosmopolitan	entire	21, 120, 135, 142, 144
<i>Globobulimina affinis</i> (d'Orbigny, 1839)	ben	18–3550	cosmopolitan	entire	40, 52, 76, 108, 113
<i>Globobulimina mississippiensis</i> Parker, 1954	ben	19–205	GMx (endemic)	ne	21, 117
<i>Globobulimina ovula</i> (d'Orbigny, 1839)	ben	87–2125	GMx, Pac, Ind	nw, ne	52, 119
<i>Globobulimina pacifica</i> Cushman, 1927	ben	159–928	cosmopolitan	nw, ne	52, 141
<i>Praeglobobulimina ovata</i> (d'Orbigny, 1846)	ben	110–2432	GMx, Carib, Atl, Pac	nw, ne, se	40, 112, 141
<i>Praeglobobulimina pupoides</i> (d'Orbigny, 1846)	ben, bab	305–1335	cosmopolitan	ne, se	40
<i>Praeglobobulimina spinescens</i> (Brady, 1884)	ben, bab	232–1178	cosmopolitan	nw, ne	40, 52, 119
Family: Pavoninidae					
<i>Pavonina atlantica</i> Cushman, 1922	ben	14–239	GMx, Carib, Atl	entire	12, 40, 52, 110
Family: Reussellidae					
<i>Chrysalidinella dimorpha</i> (Brady, 1881)	ben	unknown	cosmopolitan	ne, se	18, 21, 22
<i>Chrysalidinella popei</i> Andersen, 1961	ben, mul	unknown	GMx (endemic)	ne	3
<i>Reussella miocena</i> Cushman, 1945	ben	1–349	GMx, Carib, Atl, Ind	entire	21, 52, 108, 117, 118 ⁵⁷
Family: Siphogenerinoididae					
<i>Loxostomina costulata</i> (Cushman, 1922)	ben	1–40	cosmopolitan	nw, se	41, 112, 137
<i>Loxostomina limbata</i> (Brady, 1881)	ben	11–81	cosmopolitan	nw, se, sw	108, 109, 110, 151, 159
<i>Loxostomina mayori</i> (Cushman, 1922)	ben	5–1163	cosmopolitan	entire	12, 41, 108, 119
<i>Rectuvigerina nicoli</i> Mathews, 1945	ben, mul	unknown	GMx, Atl	ne	87
<i>Sagrina pulchella</i> d'Orbigny, 1839	ben	1–3283	GMx, Carib, Atl	entire	17, 41, 108, 117, 120 ⁵⁸
<i>Sagrinopsis advena</i> (Cushman, 1922)	ben	1–366	GMx, Carib, Atl	entire	41, 108, 117, 158 ⁵⁹
<i>Siphogenerina dimorpha</i> (Parker & Jones, 1865)	ben	14–3292	cosmopolitan	nw, ne, sw	34, 108, 117, 119
<i>Siphogenerina raphanus</i> (Parker & Jones, 1865)	ben	9–40	cosmopolitan	nw, se	41, 137
Family: Trimosinidae					
<i>Mimosina echinata</i> Heron-Allen & Earland, 1915	ben	27	GMx, Carib, Ind	se	18
Family: Uvigerinidae					
<i>Neouvigerina ampullacea</i> (Brady, 1884)	ben, bab	960–3292	cosmopolitan	nw, ne	42, 100, 119
<i>Siphouvigerina fimbriata</i> (Sidebottom, 1918)	ben	unknown	GMx, Carib, Pac, Ind	se	18
<i>Trifarina angulosa</i> (Williamson, 1858)	ben	8–3488	cosmopolitan	nw, ne, se	41, 119, 156
<i>Trifarina bella</i> (Phleger & Parker, 1951)	ben	2–770	GMx, Carib, Atl	entire	21, 52, 119, 144, 146
<i>Trifarina bradyi</i> Cushman, 1923	ben	16–3237	cosmopolitan	entire	56, 108, 109, 117, 120
<i>Trifarina carinata</i> (Cushman, 1927)	ben	16–1067	GMx, Carib, Atl, Pac	nw, ne, sw	56, 90, 111
<i>Trifarina jamaicensis</i> (Cushman & Todd, 1945)	ben	20–2761	GMx, Atl, Pac	entire	35, 36, 52, 54, 117

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Trifarina occidentalis</i> (Cushman, 1923)	ben	124	GMx, Carib, Atl, Pac	ne	42
<i>Uvigerina auberiana</i> d'Orbigny, 1839	ben	27–3251	cosmopolitan	entire	18, 35, 113, 117, 119
<i>Uvigerina bellula</i> Bandy, 1956	ben	1–3431	GMx, Carib, Atl	nw, ne, sw	17, 108, 120, 135 ⁶⁰
<i>Uvigerina flintii</i> Cushman, 1923	ben	19–823	GMx, Carib, Atl, Ind	entire	21, 36, 52, 117, 119
<i>Uvigerina hispida</i> Schwager, 1866	ben, bab	351–2538	cosmopolitan	nw, ne, sw	52, 53, 90, 109, 119,
<i>Uvigerina hispidocostata</i> Cushman & Todd, 1945	ben	2–2761	cosmopolitan	nw, ne, sw	17, 36, 52, 117, 120
<i>Uvigerina parvula</i> Cushman, 1923	ben	7–2160	GMx, Carib, Atl	entire	19, 36, 42, 87, 117
<i>Uvigerina peregrina</i> Cushman, 1923	ben	10–3164	cosmopolitan	entire	21, 36, 108, 113, 117
<i>Uvigerina selseyensis</i> Heron-Allen & Earland, 1909	ben	unknown	GMx, Carib, Pac, Ind	se	18
<i>Uvigerina senticosa</i> Cushman, 1927	ben, bab	1882–3488	GMx, Pac	nw, ne	119
<i>Uvigerina spinicostata</i> Cushman & Jarvis, 1929	ben, bab	556–2092	GMx (fossils in Carib, Atl)	nw, ne	90, 119
Superfamily: Cassidulinacea					
Family: Cassidulinidae					
<i>Cassidulina carinata</i> Silvestri, 1896	ben	21–3237	cosmopolitan	entire	52, 108, 119, 117 ⁶¹
<i>Cassidulina crassa</i> d'Orbigny, 1839	ben	27–3850	cosmopolitan	entire	18, 36, 40, 76, 119, 120
<i>Cassidulina curvata</i> Phleger & Parker, 1951	ben	21–3237	GMx, Carib, Atl	entire	56, 108, 113, 117, 120
<i>Cassidulina laevigata</i> d'Orbigny, 1826	ben	12–3283	cosmopolitan	nw, ne, sw	34, 110, 113, 117, 137
<i>Cassidulina moluccensis</i> Germeraad, 1946	ben, bab	875–2975	GMx, n Atl	nw, ne	52, 119
<i>Cassidulina norcrossi australis</i> Phleger & Parker, 1951	ben	11–1361	GMx, Carib, Atl	nw, ne, sw	52, 53, 54, 108, 120
<i>Cassidulina reniforme</i> Nørvang, 1945	ben	35–480	GMx, Atl, Ind, Arc	nw	113, 114, 115
<i>Cassidulinoides bradyi</i> (Norman, 1881)	ben	19–430	GMx, Carib, Atl, Pac	nw, ne, se	21, 112, 119 ⁶²
<i>Cassidulinoides mexicanus</i> (Cushman, 1922)	ben	13–3632	GMx, Carib, Atl	nw, ne, sw	76, 108, 119
<i>Cassidulinoides parkerianus</i> (Brady, 1881)	ben, bab	745–2975	GMx, Atl, Pac, South	nw, ne	52, 119
<i>Cassidulinoides tenuis</i> Phleger & Parker, 1951	ben	93–3250	GMx, Pac, Ind	entire	34, 52, 103, 117, 119
<i>Ehrenbergina pupa</i> (d'Orbigny, 1839)	ben, bab	710–2281	GMx, Atl, Pac	nw, ne	119
<i>Ehrenbergina spinea</i> Cushman, 1935	ben	90–480	GMx, Carib	nw, ne	52, 113, 117
<i>Ehrenbergina trigona</i> Goës, 1896	ben	99–1900	cosmopolitan	nw, ne, sw	52, 108, 119, 120
<i>Globocassidulina murrhyna</i> (Schwager, 1866)	ben, bab	459–2092	GMx (fossils in Ind)	nw, ne	119
<i>Globocassidulina pacifica</i> (Cushman, 1925)	ben, bab	280–3292	GMx, Pac, Ind	nw	119
<i>Globocassidulina subglobosa</i> (Brady, 1881)	ben	2–3850	cosmopolitan	entire	36, 76, 87, 117, 153
Superfamily: Delosinacea					
Family: Caucasinidae					
<i>Francesita advena</i> (Cushman, 1922)	ben, bab	1657–3515	GMx, Atl, Pac	nw, ne	96, 119
Superfamily: Fursenkoinacea					
Family: Fursenkoinidae					
<i>Coryphostoma spinescens</i> (Cushman, 1911)	ben	58–2281	GMx, Pac	nw, ne	52, 119
<i>Coryphostoma zanzibarica</i> (Cushman, 1936)	ben	163–459	GMx, Ind	nw	119
<i>Fursenkoina bramlettei</i> (Galloway & Morrey, 1929)	ben, bab	1110–1361	GMx, e Pac	nw, ne	52

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Fursenkoina compressa</i> (Bailey, 1851)	ben	1–1076	GMx, Carib, Atl	entire	21, 52, 135
<i>Fursenkoina pauciloculata</i> (Brady, 1884)	ben	~90–2700	cosmopolitan	nw	76, 115
<i>Fursenkoina pontoni</i> (Cushman, 1932)	ben	0–2280	cosmopolitan	entire	21, 108, 117, 120, 142
<i>Fursenkoina punctata</i> (d'Orbigny, 1839)	ben	1–2560	GMx, Carib, Atl, South	entire	17, 41, 117, 135, 151
<i>Fursenkoina seminuda</i> (Natland, 1938)	ben, bab	197–2125	GMx, e Pac	nw, ne	52, 54, 119
<i>Fursenkoina spinicostata</i> (Phleger & Parker, 1951)	ben	3–793	GMx, Carib	nw, ne, sw	34, 52, 56, 111, 120
<i>Fursenkoina squamosa</i> (d'Orbigny, 1926)	ben	13	GMx, Atl, Pac	se	154
<i>Fursenkoina tessellata</i> (Phleger & Parker, 1951)	ben	23–2213	GMx (endemic)	nw, ne, sw	108, 117, 120
<i>Rutherfordoides mexicanus</i> (Cushman, 1922)	ben	1–3200	GMx, Carib, Atl	entire	19, 21, 117, 120, 135
<i>Rutherfordoides rotundatus</i> (Parr, 1950)	ben	700	cosmopolitan	nw	141
<i>Sigmavirgulina tortuosa</i> (Brady, 1881)	ben	11–110	cosmopolitan	se, sw	18, 108, 109, 110
<i>Suggrunda porosa</i> Hoffmeister & Berry, 1937	ben, bab	259–853	GMx (fossils in S Amer & Europe)	nw, ne	52
Family: Virgulinelidae					
<i>Virgulinema pertusa</i> (Reuss, 1861)	ben	13–34	GMx, Carib, Ind	ne	19, 87, 95
Superfamily: Pleurostomellacea					
Family: Pleurostomellidae					
<i>Pleurostomella bolivinoidea</i> Schubert, 1911	ben, bab	710–3515	GMx (fossils in Pac)	nw, ne	119
Superfamily: Stilostomellacea					
Family: Stilostomellidae					
<i>Siphonodosaria calomorpha</i> (Reuss, 1866)	ben	122–1979	cosmopolitan	nw, ne	52, 119
Superfamily: Turritinacea					
Family: Stainforthiidae					
<i>Hopkinsina pacifica</i> Cushman, 1933	ben	4–576	cosmopolitan	ne, sw	108, 111
<i>Stainforthia complanata</i> (Egger, 1893)	ben	1–3700	cosmopolitan	entire	21, 76, 119 ⁶³
<i>Stainforthia loeblichii</i> (Feyling-Hanssen, 1954)	ben	16–586	GMx, Carib, Atl, Pac, Arc	sw	37, 108
<i>Virgulinoidea cubana</i> (Bermúdez, 1935)	ben	46	GMx, Carib	se	18
<i>Virgulinoidea razaensis</i> McCulloch, 1977	ben	unknown	GMx, e Pac	nw	132
Family: Tosaiidae					
<i>Tosaia weaveri</i> Seiglie & Bermúdez, 1967	ben	152–1845	GMx (fossils in Central & S Amer)	nw, ne	52, 119
Family: Turritinidae					
<i>Eubuliminella exilis</i> (Brady, 1884)	ben, bab	2050–2125	cosmopolitan	ne	78, 119
<i>Eubuliminella morgani</i> (Andersen, 1961)	ben	1–3017	GMx (endemic)	nw, ne, sw	8, 19, 117, 118, 133 ⁶⁴
Order: Rotaliida					
Superfamily: Acervulinacea					
Family: Acervulinidae					
<i>Acervulina inhaerens</i> Schultze, 1854	ben, ses	46	cosmopolitan	nw	137
<i>Discogypsina vesicularis</i> (Parker & Jones, 1860)	ben	3–190	cosmopolitan	entire	17, 46, 103, 109, 137
<i>Gypsina plana</i> (Carter, 1876)	ben, ses	18–61	cosmopolitan	nw, sw	102, 137
<i>Planogypsina squamiformis</i> (Chapman, 1901)	ben, ses	26–55	GMx, Carib, Pac	nw	137
<i>Sphaerogypsina globulus</i> (Reuss, 1848)	ben	1–110	cosmopolitan	nw, se	112, 137

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
Family: Homotrematidae					
<i>Homotrema rubra</i> (Lamarck, 1816)	ben, ses	0–55	cosmopolitan	entire	41, 108, 112, 135, 137
<i>Sporadotrema cylindrica</i> (Carter, 1880)	ben, ses	46–55	GMx, Carib, Atl, Ind	nw	137
Superfamily: Asterigerinacea					
Family: Asterigerinatidae					
<i>Eoeponidella pulchella</i> (Parker, 1952)	ben	26–49	cosmopolitan	nw	137
Family: Asterigerinidae					
<i>Asterigerina carinata</i> d'Orbigny, 1839	ben	0–220	GMx, Carib, Atl	entire	41, 57, 109, 117, 135
Family: Amphisteginidae					
<i>Amphistegina gibbosa</i> d'Orbigny, 1839	ben, esb	0–132	GMx, Carib, Atl	entire	12, 21, 34, 70, 108, 137
Family: Anomalinidae					
<i>Anomalinoides colligerus</i> (Chapman & Parr, 1937)	ben	0–29	cosmopolitan	se	41, 112
<i>Anomalinoides deprimus</i> (Phleger & Parker, 1951)	ben	2–3700	GMx (endemic)	entire	8, 35, 36, 56, 117, 119
<i>Anomalinoides globulosus</i> (Chapman & Parr, 1937)	ben, bab	924–1178	cosmopolitan	nw, ne	52, 119
<i>Anomalinoides io</i> (Cushman, 1931)	ben	2–2432	GMx, Carib, Atl	entire	35, 46, 52, 104, 117
<i>Anomalinoides mexicanus</i> Parker, 1954	ben, bab	181–2280	GMx (endemic)	nw, ne	117, 119, 140
Family: Epistomariidae					
<i>Asanonella tubulifera</i> (Heron-Allen & Earland, 1915)	ben	26–55	GMx, Carib, Pac, Ind	nw	137
<i>Nuttallides decorata</i> (Phleger & Parker, 1951)	ben, bab	155–3850	GMx, Carib, Atl	entire	52, 76, 117, 119
<i>Palmerinella gardenislandensis</i> (Akers, 1952)	ben	0–21	GMx (endemic)	nw, ne, sw	1, 8, 87, 128
<i>Palmerinella palmerae</i> Bermúdez, 1934	ben	0–46	GMx, Carib	entire	18, 122, 142, 143, 144
Superfamily: Chilostomellacea					
Family: Chilostomellidae					
<i>Allomorphina pacifica</i> Cushman & Todd, 1949	ben, bab	938	GMx, Pac, Ind, Arc	nw	119 ⁶⁵
<i>Chilostomella oolina</i> Schwager, 1878	ben	86–3550	GMx, Atl, Pac, Ind	nw, ne, sw	52, 76, 108, 117, 119
<i>Chilostomella ovoidea</i> Reuss, 1850	ben, bab	305–847	cosmopolitan	ne, se	43
Family: Gavelinellidae					
<i>Discanomalina coronata</i> (Parker & Jones, 1857)	ben	15	cosmopolitan	se	78, 112
<i>Gyroidina bradyi</i> (Trauth, 1918)	ben	110–3550	cosmopolitan	entire	76, 77, 78, 112, 119
<i>Gyroidina lamarckiana</i> (d'Orbigny, 1839)	ben	1827–2441	cosmopolitan	nw, ne	119
<i>Gyroidina mauryae</i> (Cushman & Renz, 1942)	ben, bab	1152–2469	GMx (fossils in Carib)	sw	36
<i>Gyroidina orbicularis</i> d'Orbigny, 1826	ben	71–3515	cosmopolitan	nw, ne, sw	85, 108, 117, 119, 120
<i>Gyroidinoides altiformis</i> (Stewart & Stewart, 1930)	ben	0–3515	GMx, Atl, Pac	entire	21, 108, 117, 119
<i>Gyroidinoides neosoldanii</i> (Brotzen, 1936)	ben, bab	183–3283	cosmopolitan	entire	52, 56, 109, 110, 117
<i>Gyroidinoides poliui</i> (Phleger & Parker, 1951)	ben	99–3850	cosmopolitan	entire	76, 103, 117, 119, 135
<i>Gyroidinoides regularis</i> (Phleger & Parker, 1951)	ben	48–3632	GMx, Carib, Atl	entire	21, 76, 117, 135
<i>Gyroidinoides soldanii</i> (d'Orbigny, 1826)	ben	110–2975	cosmopolitan	nw, ne, se	46, 112, 119
<i>Gyroidinoides umbonatus</i> (Silvestri, 1898)	ben	65–3850	GMx, Carib, Atl, Ind	nw, ne, sw	52, 76, 119

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Hanzawaia concentrica</i> (Cushman, 1918)	ben	1–276	cosmopolitan	entire	10, 12, 18, 119, 143
<i>Hanzawaia strattoni</i> (Applin, 1925)	ben	1–372	GMx, Carib, Atl	nw, ne, sw	22, 52, 54, 87, 144
Family: Oridorsalidae					
<i>Oridorsalis sidebottomi</i> (Earland, 1934)	ben, bab	938–3292	GMx, s Atl	nw	119
<i>Oridorsalis umbonatus</i> (Reuss, 1851)	ben	36–3700	cosmopolitan	entire	35, 117, 119, 120, 153
<i>Oridorsalis westi</i> Andersen, 1961	ben	19–2700	GMx, Carib	nw, ne, sw	34, 52, 56, 76, 108, 110
Family: Osangulariidae					
<i>Osangularia culter</i> (Parker & Jones, 1865)	ben, bab	400–3850	cosmopolitan	entire	76, 85, 117, 119, 140
<i>Osangularia rugosa</i> (Phleger & Parker, 1951)	ben, bab	256–3850	cosmopolitan	nw, ne, sw	35, 52, 76, 77, 117, 120
Family: Svratkinidae					
<i>Svratkina australiensis</i> (Chapman, Parr, & Collins, 1934)	ben	26	GMx, Pac	nw	137
Family: Trichohyalidae					
<i>Buccella hannai</i> (Phleger & Parker, 1951)	ben	1–220	cosmopolitan	nw, ne, sw	10, 12, 34, 81, 110, 120
<i>Buccella karsteni</i> (Reuss, 1855)	ben	110	GMx, Carib, Atl	se	112
Superfamily: Discorbacea					
Family: Bagginidae					
<i>Baggina bradyi</i> (Brotzen, 1936)	ben	10–29	GMx, Atl, Pac	se	112 ⁶⁶
<i>Cancris auriculus</i> (Fichtel & Moll, 1798)	ben	18–576	cosmopolitan	nw, ne, sw	108, 113, 119
<i>Cancris oblongus</i> (Williamson, 1858)	ben	1–914	cosmopolitan	entire	21, 36, 82, 117, 120
<i>Cancris sagra</i> (d'Orbigny, 1839)	ben	9–414	GMx, Carib, Atl, Pac	entire	11, 34, 46, 52, 109
<i>Neocrosbyia minuta</i> (Parker, 1954)	ben	42–3246	GMx, Carib, Pac	nw, ne, sw	36, 52, 117, 119, 140
<i>Physalidia earlandi</i> Bermúdez, 1935	ben	4–73	GMx (endemic)	se	18
<i>Valvulineria complanata</i> (d'Orbigny, 1846)	ben	152–2975	GMx, e Atl	nw, ne	119
<i>Valvulineria glabra</i> (Cushman, 1927)	ben	16–1972	GMx, Pac, Ind	nw, se, sw	52, 56, 57, 76, 100, 110
<i>Valvulineria laevigata</i> (Phleger & Parker, 1951)	ben	40–3640	cosmopolitan	nw, ne, sw	35, 52, 108, 119, 120
<i>Valvulineria mexicana</i> Parker, 1954	ben	88–3283	GMx, Carib	entire	52, 108, 117, 123, 140
Family: Bronnimannidae					
<i>Bronnimannia caribaea</i> (Cushman, 1931)	ben	46	GMx, Carib	se	18
<i>Bronnimannia palmerae</i> (Bermúdez, 1935)	ben	37	GMx, Carib, Ind	se	18
Family: Discorbidae					
<i>Disconorbis bulbosus</i> (Parker, 1954)	ben	1–238	GMx, Carib, Atl	entire	8, 9, 10, 57, 117, 124
<i>Discorbis torrei</i> Bermúdez, 1935	ben	46	GMx, Carib	se	18
<i>Neoeponides auberii</i> (d'Orbigny, 1839)	ben	0–130	GMx, Carib, Atl, Ind	ne, se, sw	41, 46, 56, 78, 109 ⁶⁷
<i>Neoeponides coryelli</i> (Palmer, 1945)	ben	5–375	GMx (fossils in Carib)	nw, ne, sw	119, 143
<i>Strebloides advenus</i> (Cushman, 1922)	ben	2–110	GMx, Carib, Atl, Pac	se	18, 41, 46
<i>Trochulina rosea</i> (Guérin-Méneville, 1832)	ben	0–110	cosmopolitan	ne, se, sw	18, 21, 46, 56, 134 ⁶⁸
Family: Eponididae					
<i>Eponides antillarum</i> (d'Orbigny, 1839)	ben	1–2002	GMx, Carib, Atl	entire	21, 76, 92, 108, 117
<i>Eponides cribrorrepandus</i> (Asano & Uchio, 1951)	ben	13–93	cosmopolitan	ne	12
<i>Eponides inceratus</i> (Cushman, 1922)	ben	3–110	GMx, Carib	se	41, 51, 112

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Eponides repandus</i> (Fichtel & Moll, 1798)	ben	1–183	cosmopolitan	entire	46, 54, 89, 108, 117
<i>Eponides tuberculatus</i> (Balkwill & Wright, 1885)	ben	73	GMx, Atl, Ind	se	18
<i>Eponides turgidus</i> Phleger & Parker, 1951	ben	1–3850	GMx, Carib, Atl, Pac	entire	56, 57, 73, 77, 117, 120
<i>Ioanella tumidula</i> (Brady, 1884)	ben	68–3850	cosmopolitan	entire	35, 76, 103, 117
<i>Poroeponides lateralis</i> (Terquem, 1878)	ben	1–110	cosmopolitan	nw, ne, se	17, 46, 89, 92
Family: Heleninidae					
<i>Helenina anderseni</i> (Warren, 1957)	ben, itm	0–4	cosmopolitan	nw, ne	126, 142, 158
Family: Mississippinidae					
<i>Stomatorbina concentrica</i> (Parker & Jones, 1864)	ben	27–181	cosmopolitan	entire	12, 18, 103, 108, 119
Family: Pegidiidae					
<i>Sphaeridia rugata</i> Heron-Allen & Earland, 1928	ben	27–37	GMx, Pac	nw	137
Family: Rosalinidae					
<i>Gavelinopsis basilica</i> (Bandy, 1956)	ben	1–835	GMx (endemic)	nw, ne, sw	8, 12, 52, 119
<i>Gavelinopsis translucens</i> (Phleger & Parker, 1951)	ben	0–3246	GMx, Atl, Ind	entire	10, 104, 117, 146, 153
<i>Neoconorbina terquemi</i> (Rzehak, 1888)	ben	2–3250	cosmopolitan	entire	8, 52, 112, 117, 119 ⁶⁹
<i>Rosalina candeiana</i> d'Orbigny, 1839	ben	0–914	GMx, Carib, Atl, Ind	entire	21, 36, 46, 117, 120 ⁷⁰
<i>Rosalina columbiensis</i> (Cushman, 1925)	ben	0–92	GMx, Atl, Pac	entire	22, 34, 56, 57, 110, 142
<i>Rosalina floridana</i> (Cushman, 1922)	ben	0–914	cosmopolitan	entire	17, 21, 117, 120, 144
<i>Rosalina floridensis</i> (Cushman, 1930)	ben	1–576	GMx, Carib, Atl, Pac	entire	17, 21, 108, 113
<i>Rosalina globularis</i> d'Orbigny, 1826	ben, mpl	1–55	cosmopolitan	nw, ne, se	41, 137, 161 ⁷¹
<i>Rosalina obtusa</i> d'Orbigny, 1846	ben	46	GMx, Carib, Atl, Pac, South	se	18
<i>Rosalina subaraucana</i> (Cushman, 1922)	ben	1–84	GMx, Carib, Atl	entire	41, 108, 111, 115
<i>Rosalina vilardeboana</i> d'Orbigny, 1839	ben	10–15	cosmopolitan	se	112
<i>Rosalina williamsoni</i> (Chapman & Parr, 1932)	ben	1–3180	cosmopolitan	entire	35, 37, 104, 117, 137 ⁷²
<i>Tretomphaloides concinnus</i> (Brady, 1884)	ben, mpl	2–210	GMx, Carib, Pac, Ind, South	nw, ne, se	12, 17, 18, 113, 137 ⁷³
Family: Sphaeroidinidae					
<i>Sphaeroidina bulloides</i> d'Orbigny, 1826	ben	91–3283	cosmopolitan	nw, ne, sw	36, 52, 76, 117, 119
<i>Sphaeroidina compacta</i> Cushman & Todd, 1949	ben	117–2280	GMx, Carib, Pac	ne	117
Superfamily: Discorbinellacea					
Family: Discorbinellidae					
<i>Discorbinella bertheloti</i> (d'Orbigny, 1839)	ben	10–375	cosmopolitan	entire	52, 112, 117, 119
<i>Laticarinina pauperata</i> (Parker & Jones, 1865)	ben	144–3850	cosmopolitan	entire	35, 76, 110, 113, 117
Family: Pseudoparrellidae					
<i>Epistominella exigua</i> (Brady, 1884)	ben	2–3700	cosmopolitan	entire	35, 117, 144, 153, 162
<i>Epistominella vitrea</i> Parker, 1953	ben	1–3632	GMx, Carib, Atl, Pac, South	nw, ne, sw	76, 117, 118, 135
<i>Stetsonia minuta</i> Parker, 1954	ben	16–3251	GMx, Carib, Atl	entire	52, 56, 117, 124

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
Superfamily: Glabratellacea					
Family: Buliminoididae					
<i>Buliminoides curtus</i> Seiglie, 1965	ben	26–55	GMx, Carib, Pac	nw	137
<i>Buliminoides parallelus</i> (Cushman & Parker, 1931)	ben	26–40	GMx, Carib, Atl, Pac	nw, se	137
<i>Buliminoides williamsonianus</i> (Brady, 1881)	ben	13–43	cosmopolitan	se, sw	41, 108
Family: Glabratellidae					
<i>Conorbella erecta</i> (Sidebottom, 1908)	ben	46	GMx, Carib, Atl, Ind	se	18
<i>Conorbella pulvinata</i> (Brady, 1884)	ben	46	cosmopolitan	se	18
<i>Glabratella carinata</i> Seiglie & Bermúdez, 1965	ben	26–40	GMx, Carib	nw	137
<i>Glabratella hexacamerata</i> Seiglie & Bermúdez, 1965	ben, ses	26–49	GMx, Carib	nw	137
<i>Glabratella mirabilis</i> Seiglie & Bermúdez, 1965	ben	46	GMx, Carib, Atl	se	18 ⁷⁴
<i>Murrayinella murrayi</i> (Heron-Allen & Earland, 1915)	ben	9–18	GMx, Carib, Pac, Ind	se	18
Family: Heronalleniidae					
<i>Heronallenia gemmata</i> Earland, 1934	ben, bab	1178–1900	GMx, South	nw, ne	119
Superfamily: Nonionacea					
Family: Nonionidae					
<i>Astrononion gallowayi</i> Loeblich & Tappan, 1953	ben	15–878	GMx, Atl, Pac, Arc	nw, ne	52 ⁷⁵
<i>Astrononion stelligerum</i> (d'Orbigny, 1839)	ben	48–110	cosmopolitan	se	21, 112
<i>Haynesina germanica</i> (Ehrenberg, 1840)	ben	0–184	cosmopolitan	entire	10, 21, 34, 118, 160 ⁷⁶
<i>Laminononion tumidum</i> (Cushman & Edwards, 1937)	ben, bab	244–2560	cosmopolitan	entire	35, 52, 117, 119
<i>Melonis affinis</i> (Reuss, 1851)	ben	61–183	GMx, Carib, Atl, Pac, South	ne	12
<i>Melonis barleeianum</i> (Williamson, 1858)	ben	2–2200	cosmopolitan	entire	34, 35, 52, 56, 108, 119
<i>Melonis pompilioides</i> (Fichtel & Moll, 1798)	ben	16–3850	cosmopolitan	entire	56, 76, 109, 117, 120
<i>Nonion commune</i> (d'Orbigny, 1846)	ben	163–933	GMx, Atl, Pac	nw, ne	78, 119, 140
<i>Nonion formosum</i> (Seguenza, 1880)	ben	62–1730	GMx (fossils in Europe)	nw, ne	103, 117, 124
<i>Nonionella astricta</i> McCulloch, 1965	ben	22–324	GMx, Carib, Pac	sw	56, 108, 109, 110
<i>Nonionella atlantica</i> Cushman, 1947	ben	0–966	GMx, Carib, Atl, Pac	entire	34, 52, 117, 118, 142
<i>Nonionella basiloba</i> Cushman & McCulloch, 1940	ben	6–2238	GMx, e Pac	nw, ne, sw	56, 73, 95, 110, 141
<i>Nonionella opima</i> Cushman, 1947	ben	1–3184	GMx, Carib, Atl, Ind	nw, ne, sw	63, 117, 119, 143, 144
<i>Nonionella pulchella</i> Hada, 1931	ben	unknown	GMx, Pac, Ind	ne	111
<i>Nonionellina labradorica</i> (Dawson, 1860)	ben	267–290	GMx, Atl, Pac, Arc	nw	52
<i>Nonionoides grateoupui</i> (d'Orbigny, 1839)	ben	1–3411	cosmopolitan	entire	21, 41, 108, 120
<i>Pseudononion clavatum</i> (Cushman, 1931)	ben, bab	819–3292	GMx (fossils in s Pac)	nw, ne	52, 76, 119
<i>Pullenia bulloides</i> (d'Orbigny, 1846)	ben	22–3700	cosmopolitan	entire	35, 52, 56, 110, 117
<i>Pullenia osloensis</i> Feyling-Hanssen, 1954	ben	163–3515	GMx, Atl, Ind, Arc	nw	119
<i>Pullenia quinqueloba</i> (Reuss, 1851)	ben	53–3700	cosmopolitan	entire	35, 117, 119, 120 ⁷⁷

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Pullenia subsphaerica</i> Parr, 1950	ben, bab	735–3515	GMx, South	nw, ne	52, 90, 119
<i>Pullenia trinitatensis</i> Cushman & Stainforth, 1945	ben, bab	710–3515	GMx (fossils in Carib)	nw, ne	52, 119
Superfamily: Nummulitacea					
Family: Nummulitidae					
<i>Heterostegina antillarum</i> d'Orbigny, 1839	ben, esb	0–48	GMx, Carib, Atl	nw, se, sw	45, 109, 112, 137
Superfamily: Planorbulinacea					
Family: Bisaccidae					
<i>Bisaccium imbricatum</i> Andersen, 1951	ben, itm	<1	GMx, Carib	ne	2, 158
Family: Cibicididae					
<i>Cibicides advenum</i> (d'Orbigny, 1839)	ben	1–110	GMx, Carib, Atl	se, sw	34, 110, 112
<i>Cibicides antillarum</i> (d'Orbigny, 1839)	ben	29	GMx, Carib	se	112
<i>Cibicides bantamensis</i> LeRoy, 1941	ben, bab	267–1030	GMx (fossils in Indonesia)	nw, ne	52, 53, 54, 119
<i>Cibicides floridanus</i> (Cushman, 1918)	ben	2–586	cosmopolitan	entire	18, 22, 46, 108, 119
<i>Cibicides kullenbergi</i> Parker, 1953	ben	79–3515	GMx, Carib, Atl, Pac	entire	36, 117, 119, 140
<i>Cibicides lobatulus</i> (Walker & Jacob, 1798)	ben	1–2286	cosmopolitan	entire	17, 36, 112, 113, 119
<i>Cibicides protuberans</i> Parker, 1954	ben	20–1829	GMx (fossils in Central America)	ne, sw	117, 135
<i>Cibicides refulgens</i> de Montfort, 1808	ben	137–1940	cosmopolitan	se, sw	35, 36
<i>Cibicides rugosus</i> Phleger & Parker, 1951	ben	159–3500	GMx, Atl	nw, ne, sw	76, 103, 117, 119
<i>Cibicides wuellerstorfi</i> (Schwager, 1866)	ben, bab	457–3850	cosmopolitan	entire	76, 117, 119
<i>Cibicoides corpulentus</i> (Phleger & Parker, 1952)	ben	1–3250	GMx, Carib, South	entire	21, 35, 108, 117, 119 ⁷⁸
<i>Cibicoides incrassatus</i> (Fichtel & Moll, 1798)	ben	16–1361	GMx, Atl	nw, ne	52, 53, 54, 113
<i>Cibicoides mollis</i> (Phleger & Parker, 1951)	ben	11–926	GMx, Carib, Atl	nw, ne, sw	56, 108, 113, 117, 119
<i>Cibicoides mundulus</i> (Brady, Parker, & Jones, 1888)	ben, bab	457–3850	cosmopolitan	nw, ne, sw	52, 76
<i>Cibicoides pachyderma</i> (Rzehak, 1886)	ben	14–3230	GMx, Atl, Pac	nw, ne, sw	52, 76, 113, 153
<i>Cibicoides pseudoungerianus</i> (Cushman, 1922)	ben	4–1417	cosmopolitan	entire	8, 12, 36, 46, 119
<i>Cibicoides robertsonianus</i> (Brady, 1881)	ben, bab	155–3550	cosmopolitan	entire	76, 117, 119, 120 ⁷⁹
<i>Cibicoides umbonatus</i> (Phleger & Parker, 1951)	ben	3–3250	GMx, Carib, Pac	entire	36, 53, 56, 57, 117, 119
<i>Planorbulinoides retinaculatus</i> (Parker & Jones, 1862)	ben, ses	46–55	GMx, Carib, Pac	nw	137
Family: Cymbaloporidae					
<i>Cymbaloporetta atlantica</i> (Cushman, 1934)	ben, mpl	0–57	GMx, Carib, Atl, Pac	entire	3, 21, 47, 82, 108 ⁷³
<i>Cymbaloporetta poeyi</i> (d'Orbigny, 1839)	ben, mpl	1–110	GMx, Carib	se	51, 154 ⁷³
<i>Cymbaloporetta squamosa</i> (d'Orbigny, 1839)	ben, mpl	0–847	cosmopolitan	ne, se	41, 46, 51, 112 ⁷³
Family: Louisianinidae					
<i>Louisianina pflumi</i> Denne & Sen Gupta, 1996	ben	100–2180	GMx (endemic)	nw, ne	52, 55, 76, 119 ⁸⁰
Family: Planorbulinidae					
<i>Planorbulina acervalis</i> Brady, 1884	ben, ses	1–53	cosmopolitan	entire	17, 51, 110, 112, 137
<i>Planorbulina mediterraneensis</i> d'Orbigny, 1826	ben, ses	1–192	cosmopolitan	entire	21, 46, 108, 117, 120

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/ Endnotes
<i>Planorbulinella larvata</i> (Parker & Jones, 1865)	ben	15	GMx, Carib, Pac, Ind	se	112
Family: Planulinidae					
<i>Planulina ariminensis</i> d'Orbigny, 1826	ben	3–1000	cosmopolitan	entire	8, 108, 119, 120, 135
<i>Planulina depressa</i> (d'Orbigny, 1839)	ben	110	GMx, Carib, Pac	se	18
<i>Planulina edwardsiana</i> (d'Orbigny, 1839)	ben	1–110	GMx, Carib	se	41, 46, 112
<i>Planulina exorna</i> Phleger & Parker, 1951	ben	2–549	GMx, Carib, Atl, Pac	entire	21, 36, 52, 117, 120
<i>Planulina foveolata</i> (Brady, 1884)	ben	8–936	GMx, Carib, Atl	entire	12, 34, 52, 56, 119, 120
<i>Planulina mera</i> Cushman, 1944	ben	13–94	GMx, Atl	ne, sw	3, 34, 108
<i>Planulina ornata</i> (d'Orbigny, 1839)	ben	10–183	GMx, Carib, Atl, Pac	nw, ne, sw	11, 12, 93
Family: Victoriellidae					
<i>Biarritzina proteiformis</i> (Goës, 1882)	ben, ses	19	cosmopolitan	ne	21
<i>Carpenteria candei</i> (d'Orbigny, 1839)	ben, ses	46	GMx, Carib, Atl	se	18
<i>Carpenteria utricularis</i> (Carter, 1876)	ben, ses	27–55	GMx, Carib, Pac, Ind	nw	137
Superfamily: Rotaliacea					
Family: Elphidiidae					
<i>Criboelphidium lene</i> (Cushman & McCulloch, 1940)	ben	2	GMx, e Pac	sw	144
<i>Criboelphidium poeyanum</i> (d'Orbigny, 1839)	ben	0–324	cosmopolitan	entire	21, 34, 56, 73, 119, 144
<i>Elphidium advenum</i> (Cushman, 1922)	ben	0–117	cosmopolitan	entire	112, 117, 124, 144, 156
<i>Elphidium articulatum</i> (d'Orbigny, 1839)	ben	1–9	GMx, Carib, Atl, Pac	nw, se, sw	18, 93, 138
<i>Elphidium crispum</i> (Linné, 1758)	ben	0–63	cosmopolitan	nw, ne, se	21, 104, 113, 154
<i>Elphidium delicatulum</i> Bermúdez, 1949	ben	0–20	GMx, Carib	nw, ne, sw	10, 17, 87, 89
<i>Elphidium discoideale</i> (d'Orbigny, 1839)	ben	1–238	GMx, Carib, Atl, Pac	entire	56, 92, 110, 119, 158
<i>Elphidium excavatum</i> (Terquem, 1875)	ben	0–143	GMx, Carib, Atl, Pac, Arc	entire	1, 10, 57, 120, 149 ⁸¹
<i>Elphidium fimbriatulum</i> (Cushman, 1918)	ben	2–184	GMx, Carib	entire	3, 34, 56, 57, 108, 137
<i>Elphidium gunteri</i> Cole, 1931	ben	0–183	GMx, Carib, Atl, Pac	entire	10, 19, 87, 104, 117 ⁸²
<i>Elphidium koeboeense</i> LeRoy, 1939	ben	1–57	GMx (fossils in Indo-Pac)	ne, sw	34, 121, 144
<i>Elphidium kugleri</i> (Cushman & Brönnimann, 1948)	ben	0–5	GMx, Carib	nw, ne	89, 158
<i>Elphidium lanieri</i> (d'Orbigny, 1839)	ben	1–36	GMx, Carib, Atl, Ind	ne, se, sw	21, 105, 109, 135 ⁸³
<i>Elphidium macellum</i> (Fichtel & Moll, 1798)	ben	0–29	cosmopolitan	se	41, 112
<i>Elphidium milletti</i> (Heron-Allen & Earland, 1915)	ben	18	GMx, Carib, Ind	se	18
<i>Elphidium morenoi</i> Bermúdez, 1935	ben	0–8	GMx, Carib, Atl	nw, se	48, 138
<i>Elphidium rugulosum</i> Cushman & Wicken- den, 1929	ben	2–14	GMx, Carib, Atl, Pac	ne	12
<i>Elphidium translucens</i> Natland, 1938	ben	1–152	cosmopolitan	nw, ne, sw	17, 52, 73
<i>Elphidium tumidum</i> Natland, 1938	ben	1–8	GMx, e Pac	ne	17

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Family: Rotaliidae					
<i>Ammonia parkinsoniana</i> (d'Orbigny, 1839)	ben	0–80	cosmopolitan	entire	21, 108, 114, 133 ⁸⁴
<i>Ammonia pauciloculata</i> (Phleger & Parker, 1951)	ben	1–205	GMx, Carib, Atl, Ind	nw, ne, sw	19, 118, 120, 144
<i>Ammonia rolshauseni</i> (Cushman & Bermúdez, 1946)	ben	1–85	GMx, Carib, Atl	nw, ne, sw	9, 118, 120, 144, 158
<i>Ammonia tepida</i> (Cushman, 1926)	ben	0–80	cosmopolitan	entire	19, 72, 120, 135
Superfamily: Siphoninacea					
Family: Siphoninidae					
<i>Siphonina bradyana</i> Cushman, 1927	ben	0–950	cosmopolitan	entire	21, 52, 108, 117, 120
<i>Siphonina primitiva</i> Hofker, 1956	ben	26	GMx, Carib	nw	137
<i>Siphonina pulchra</i> Cushman, 1919	ben	0–775	GMx, Carib, Atl	entire	10, 41, 101, 117, 120
<i>Siphonina reticulata</i> (Czjzek, 1848)	ben	110	GMx, Carib, Atl	se	112
<i>Siphonina tubulosa</i> Cushman, 1924	ben	26–53	cosmopolitan	nw	137
<i>Siphoninella soluta</i> (Brady, 1884)	ben	73	GMx, Carib, Pac	se	18
<i>Siphoninoides echinatus</i> (Brady, 1879)	ben	unknown	cosmopolitan	se	18
<i>Siphoninoides glabra</i> (Heron-Allen & Earland, 1915)	ben	46	GMx, Carib, Ind	se	18
Order: Globigerinida					
Superfamily: Globigerinacea					
Family: Globigerinidae					
<i>Beella digitata</i> (Brady, 1879)	plk		n temp to s temp	entire	59, 60, 76, 117, 119
<i>Globigerina bulloides</i> d'Orbigny, 1826	plk		arc to antarctic	entire	12, 59, 75, 88, 120, 131
<i>Globigerina falconensis</i> Blow, 1959	plk, esb		subarc to subantarctic	entire	29, 59, 60, 76, 88, 119
<i>Globigerina rubescens</i> Hofker, 1956	plk		n temp to s temp	entire	59, 60, 119
<i>Globigerinella aequilateralis</i> (Brady, 1879)	plk, esb		n temp to s temp	entire	12, 59, 60, 75, 120, 131
<i>Globigerinella calida</i> (Parker, 1962)	plk		n temp to s temp	entire	59, 60, 76, 119
<i>Globigerinoides conglobatus</i> (Brady, 1879)	plk, esb		subarc to s temp	entire	12, 59, 60, 75, 120, 131
<i>Globigerinoides ruber</i> (d'Orbigny, 1839)	plk, esb		n temp to s temp	entire	29, 59, 75, 88, 120 ⁸⁵
<i>Globigerinoides sacculifer</i> (Brady, 1877)	plk, esb		n trans to s trans	entire	11, 12, 29, 60, 92, 119
<i>Globigerinoides tenellus</i> Parker, 1958	plk		n temp to s temp	entire	59, 60
<i>Orbulina universa</i> d'Orbigny, 1839	plk, esb		subarc to s temp	entire	12, 59, 60, 75, 119, 120
<i>Sphaeroidinella dehiscens</i> (Parker & Jones, 1865)	plk		n trans to s trans	entire	59, 60, 75, 120, 131
<i>Turborotalita humilis</i> (Brady, 1884)	plk, esb		n temp to s temp	nw, ne	119
<i>Turborotalita quinqueloba</i> (Natland, 1938)	plk		disjunct 1	entire	59, 60, 88, 119
Family: Hastigerinidae					
<i>Hastigerina pelagica</i> (d'Orbigny, 1839)	plk		n temp to s temp	nw, se	59, 60, 75, 117, 119
<i>Orcadia riedeli</i> (Rögl & Bolli, 1973)	plk		subarc to subantarctic	nw, ne	28 ⁸⁶
Superfamily: Globorotaliacea					
Family: Candeinidae					
<i>Candeina nitida</i> d'Orbigny, 1839	plk, esb		n subtrop to s subtrop	entire	12, 59, 60, 75, 119, 131
<i>Globigerinita clarkei</i> (Rögl & Bolli, 1973)	plk		subarc to subantarctic	nw, ne	⁸⁶
<i>Globigerinita glutinata</i> (Egger, 1893)	plk, esb		arc to antarctic	entire	29, 59, 60, 75, 119
<i>Tenuitella iota</i> (Parker, 1962)	plk		n subtrop to s subtrop	nw, ne	⁸⁶

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
Family: Globorotaliidae					
<i>Dentigloborotalia anfracta</i> (Parker, 1967)	plk		n temp to s temp	nw, ne	27 ⁸⁶
<i>Globorotalia crassaformis</i> (Galloway & Wissler, 1927)	plk		n temp to s temp	entire	59, 60, 75, 119, 131
<i>Globorotalia hirsuta</i> (d'Orbigny, 1839)	plk		subarc to s temp	entire	59, 60, 75, 117, 119
<i>Globorotalia inflata</i> (d'Orbigny, 1839)	plk		disjunct 2	entire	16, 59, 119, 120, 131
<i>Globorotalia menardii</i> (Parker, Jones, & Brady, 1865)	plk		n temp to s temp	entire	29, 60, 75, 119, 120 ⁸⁷
<i>Globorotalia scitula</i> (Brady, 1882)	plk		subarc to antarctic	entire	60, 75, 119, 120, 131
<i>Globorotalia truncatulinoides</i> (d'Orbigny, 1839)	plk		subarc to subantarctic	entire	12, 29, 59, 60, 75, 131
<i>Globorotalia tumida</i> (Brady, 1877)	plk		n temp to s temp	entire	12, 16, 60, 123, 152
<i>Globorotalia unguolata</i> Bermúdez, 1960	plk		n subtrop to s subtrop	nw, se, sw	60, 76, 152
<i>Neogloboquadrina dutertrei</i> (d'Orbigny, 1839)	plk		n temp to s temp	entire	29, 59, 75, 76, 119 ⁸⁸
<i>Neogloboquadrina pachyderma</i> (Ehrenberg, 1861)	plk		disjunct 1	entire	59, 60, 88, 119, 130
Family: Pulleniatinidae					
<i>Pulleniatina obliquiloculata</i> (Parker & Jones, 1865)	plk		n temp to s temp	entire	12, 29, 59, 75, 119
Order: Robertinida					
Superfamily: Ceratobuliminacea					
Family: Ceratobuliminidae					
<i>Lamarckina atlantica</i> Cushman, 1931	ben	1–110	GMx, Carib, Atl	nw, se, sw	18, 89, 108, 137
<i>Lamarckina scabra</i> (Brady, 1884)	ben	110	cosmopolitan	se	18
Family: Epistominidae					
<i>Hoeglundina elegans</i> (d'Orbigny, 1826)	ben	36–3632	cosmopolitan	entire	56, 76, 117, 120, 141
Superfamily: Robertinacea					
Family: Robertinidae					
<i>Cushmanella brownii</i> (d'Orbigny, 1839)	ben	4–73	GMx, Carib	se, sw	18, 108, 109
<i>Robertinoides bradyi</i> (Cushman & Parker, 1936)	ben	68–3250	cosmopolitan	nw, ne, se	35, 52, 103, 110, 119
<i>Robertinoides charlottensis</i> (Cushman, 1925)	ben	165–200	GMx, Atl, Pac, Arc	nw	113
<i>Robertinoides oceanicus</i> (Cushman & Parker, 1947)	ben	892–2896	GMx, Pac, Ind	nw, ne	52, 119

¹ Also reported as *Ammodiscus incertus* (d'Orbigny, 1839).² Considered a xenophyophore by some authors, but confirmatory molecular data are lacking.³ New record for GMx; ID: LES and BKSG; coll: 4 May, 2002, from petroleum platforms off Grand Isle, Louisiana, LES; HVH 12209. Depths given are for collection sites on platform legs; bottom depths of these platforms are 31–61 m.⁴ *Halyphysema advena* Cushman, 1922, is a junior synonym.⁵ Record at 26.8353°N, 88.3708°W; Schröder, A. A. H. Bouma, and J. M. Coleman. (2005). Benthic foraminifera abundance of Hole 96-620, PANGAEA, doi:10.1594/PANGAEA.251263; data accessible at <http://doi.pangaea.de/10.1594/PANGAEA.251263>.⁶ Records reported to BKSG by personal communication from J. M. Bernhard, Woods Hole Oceanographic Institution.⁷ Record from 26.6902°N, 88.3803°W; Schröder, A. A. H. Bouma, and J. M. Coleman. (2005). Benthic foraminifera abundance of Hole 96-622, PANGAEA, doi:10.1594/PANGAEA.251265; data accessible at <http://doi.pangaea.de/10.1594/PANGAEA.251265>.⁸ Multiple species may have been reported under this name; see Jones (1994) and Loeblich and Tappan (1994).⁹ Includes specimens reported as *Reophax distans delicatulus* Cushman, 1920.¹⁰ Reported as *Cribostromoides rotulatum* by Poag (1981); water depths not specified, but distribution given as “slope, rise, Mississippi Fan, and Sigsbee Plain.”

(continued)

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (*continued*)

- ¹¹ Well-known marsh species, but living individuals have been reported from 7-m deep waters in the Mississippi River delta area (Lankford 1959).
- ¹² At 6 m depth in Lake Pontchartrain, Louisiana (Otvos 1978).
- ¹³ Also reported as *Placopsilina cenomana* d'Orbigny, 1850.
- ¹⁴ Actin and beta-tubulin data for the species suggest a closer relationship to a porcelaneous order (Miliolida) than to an agglutinated order (Lituolida); see Fahrni et al. (1997) and Habura, Wegener, and Bowser (2004); its current placement in Lituolida is because of the agglutinated wall (e.g., Kaminski 2004). This is a well-known marsh species, but living individuals have been reported from 18-m deep waters in the Mississippi River delta area (Lankford 1959).
- ¹⁵ Reported as *Textularia sagittula* DeFrance, 1824.
- ¹⁶ Reported as *Trochammina globigeriniformis* (Parker and Jones, 1865).
- ¹⁷ Some specimens may be *Tritaxis challengerii* (Hedley, Hurdle, & Burdett, 1964), if identifications were made on the basis of Brady's (1884) illustrations of *Trochammina squamata* (see Jones 1994, p. 46).
- ¹⁸ Also reported as *Haplostiche dubia* (d'Orbigny, 1826).
- ¹⁹ Also reported as *Bigenerina nodosaria* d'Orbigny, 1826.
- ²⁰ Also reported as *Pyrgo tubulosa* (Costa, 1856).
- ²¹ Also reported as *Pyrgo phlegeri* Andersen, 1961.
- ²² Also reported as *Quinqueloculina rhodiensis* Parker, 1953, and *Q. costata* d'Orbigny, 1878.
- ²³ Also reported as *Hauerina speciosa* (Karrer, 1868) and *Massilina crenata* (Karrer, 1868).
- ²⁴ Also reported as *Triloculina variolata* d'Orbigny, 1878.
- ²⁵ Also reported as *Triloculina insignis* Brady, 1881.
- ²⁶ Also reported as *Triloculina oblonga* (Montagu, 1803).
- ²⁷ Also reported as *Hauerina ornatissima* (Karrer, 1868).
- ²⁸ Reported as *Spiroloculina planulata* (Lamarck, 1804).
- ²⁹ Record for ne GMx; ID: LES and BKSG; coll: 5 May 2002 from petroleum platform legs off Grand Isle, Louisiana (near sea surface), LES; HVH 12211.
- ³⁰ Also reported as *Peneroplis cylindraceus* (Lamarck, 1804).
- ³¹ Shallow record for GMx; ID: LES and BKSG; coll: 9 June 2001, from petroleum platform off Port Fourchon, Louisiana, LES; HVH 12210. Depth given is that of collection site near platform base.
- ³² Deep record for GMx; ID: LES and BKSG; coll: 11 Oct 2002, Green Canyon, Erik Cordes, Pennsylvania State University; HVH 12212.
- ³³ Also reported as *Lagena tenuis* (Bornemann, 1855).
- ³⁴ Also reported as *Lagena distoma* Parker and Jones, 1864.
- ³⁵ Also reported as *Dentalina intorta* (Dervieux, 1894).
- ³⁶ Also reported as *Dentalina inornata* d'Orbigny, 1846.
- ³⁷ Reported as *Nodosaria consobrina emaciata* Reuss.
- ³⁸ Reported as *Orthomorphina guttifera* (d'Orbigny, 1846).
- ³⁹ Also reported as *Dentalina communis* (d'Orbigny, 1826).
- ⁴⁰ Also reported as *Amphicoryna hispida* (d'Orbigny, 1846).
- ⁴¹ Also reported as *Cristellaria lucida* Cushman, 1923, and *Robulus lucida* (Cushman, 1923).
- ⁴² Reported as *Lenticulina rotulata* (Lamarck, 1804) and *Cristellaria rotulata* (Lamarck, 1804).
- ⁴³ Also reported as *Marginulina glabra* d'Orbigny, 1826, and *Marginulina obesa* Cushman, 1923, homonym of *M. obesa* Terquem, 1866.
- ⁴⁴ Reported as *Marginulinopsis densicostata* Thalmann, 1937.
- ⁴⁵ Reported as *Vaginulina linearis* (Montagu, 1808).
- ⁴⁶ Reported as *Vaginulina legumen* (Linnaeus, 1758).
- ⁴⁷ Reported as *Lagena fasciata* (Egger) var. *spinosa* Sidebottom, 1912.
- ⁴⁸ Also reported as *Lagena acuticosta* Reuss, 1862.
- ⁴⁹ Record for sw GMx; ID: M. L. Mata; coll: 18 August 1978, Gulf of Campeche; HVH 11260.
- ⁵⁰ Reported as *Glandulina laevigata* (d'Orbigny, 1826) and *Nodosaria rotundata* (Reuss, 1850).
- ⁵¹ Reported as *Polymorphina regina* Brady, Parker, & Jones, 1870, by Cushman (1922, ref. 41), and as *Guttulina regina* (Brady, Parker, & Jones, 1870) by Bandy (1954).
- ⁵² Also reported as *Guttulina problema* d'Orbigny, 1826.
- ⁵³ Reported as *Globulina caribaea* d'Orbigny, 1839.
- ⁵⁴ Reported as *Bolivina dilatata* Reuss, 1850.
- ⁵⁵ The geographic and bathymetric ranges of *Bolivina striatula spinata* (original name *Bolivina striatula* Cushman var. *spinata* Cushman) overlap those of *B. striatula*, although only the former is reported from deep bathyal and abyssal waters of GMx. The use of this subspecies name violates standard taxonomic

Checklist of class Foraminifera (phylum Granuloreticulosa) of the Gulf of Mexico. (continued)

practice, but we have retained it because (1) the name has been used by numerous workers, apparently for a taxon that is clearly distinguishable from *B. striatula*, *sensu stricto*, and (2) future laboratory studies may show the taxon to be a separate species.

- ⁵⁶ Includes specimens reported as *Bolivina subaenariensis mexicana* Cushman, 1922.
- ⁵⁷ Frequently reported as *Reussella atlantica* Cushman, 1947, a junior synonym; see Andersen (1961). Also reported as *R. spinulosa* (Reuss, 1850).
- ⁵⁸ Also reported as *Bolivina pulchella primitiva* Cushman, 1930.
- ⁵⁹ Also reported as *Bifarina decorata* Phleger & Parker, 1951.
- ⁶⁰ Reported mostly as *Uvigerina auberiana* d'Orbigny var. *laevis* Goës or *U. laevis* Goës, 1896.
- ⁶¹ Also reported as *Cassidulina neocarinata* Thalmann, 1950. *C. laevigata* var. *carinata* Cushman, 1922, is both a homonym and a synonym of *C. carinata* Silvestri, 1896; see Jones (1994, p. 60).
- ⁶² Also reported as *Cassidulina braziliensis* Cushman, 1922.
- ⁶³ Also reported as *Fursenkoina schreibersiana* (Czjzek, 1848).
- ⁶⁴ Reported mostly as *Buliminella* sp. cf. *B. bassendorffensis* Cushman & Parker, 1937, and also as *B. bassendorffensis*. *Buliminella mississippiensis* Seiglie, 1970, is a junior synonym of *B. morgani* Andersen, 1961.
- ⁶⁵ Reported as *Allomorphina trigona* Reuss, 1850.
- ⁶⁶ Reported as *Discorbis allomorphinoides* Reuss, 1860.
- ⁶⁷ Frequently reported as *Discorbis mira* Cushman, 1922.
- ⁶⁸ Commonly reported as *Discorbis rosea* (d'Orbigny, 1826) or *Rotorbinella rosea* (d'Orbigny, 1826).
- ⁶⁹ Also reported as *Conorbina* or *Discorbis orbicularis* (Terquem, 1876).
- ⁷⁰ Also reported as *Rosalina bahamensis* Todd & Low, 1971, and *R. suzeensis* (Said, 1949), junior synonyms. By ICZN rules, *Rosalina candeiiana* is a valid name on the basis of d'Orbigny's description and illustration, notwithstanding the unavailability of primary types.
- ⁷¹ With a float-chamber ("tretomphaloid") stage in ontogeny; reported also as *Tretomphalus bulloides* (d'Orbigny, 1839).
- ⁷² Also reported as *Rosalina parkerae* (Natland, 1950) and *Discorbis nitida* (Williamson, 1858).
- ⁷³ With a float-chamber ("tretomphaloid") stage in ontogeny (Banner, Pereira, and Desai 1985).
- ⁷⁴ Reported as *Discorbis globosa* (Sidebottom, 1909).
- ⁷⁵ Shallow record for GMx; ID: LES and BKSG; coll: 9 June 2001, from petroleum platform off Port Fourchon, Louisiana, LES; HVH 12213. Depth given is that of collection site near platform base.
- ⁷⁶ Also reported as *Elphidium matagordanum* (Kornfeld, 1931) and *Haynesina depressulum* (Walker & Jacob, 1798).
- ⁷⁷ Also reported as *Pullenia subcarinata* (d'Orbigny, 1839).
- ⁷⁸ Also reported as *Cibicides robustus* Phleger & Parker, 1951.
- ⁷⁹ This is a well known deep-water species. Phleger (1951, p. 45) says that it is not present above about 450 m, but his Table 12 includes a single specimen in a 51 m sample, which may be an erroneous entry.
- ⁸⁰ Also reported as "*Valvulineria opima*" (author unknown).
- ⁸¹ Intergrading variants of *Elphidium excavatum* have been reported under multiple species/subspecies names; see Feyling-Hanssen (1972).
- ⁸² Includes specimens reported as *Elphidium galvestonense* Kornfeld, 1931. A nonmarine occurrence of the species (referred to as *Criboelphidium gunteri*) in Lake Winnipegosis, Manitoba, Canada, was reported by Boudreau et al. (2001).
- ⁸³ Also reported as *Elphidium sagrum* (d'Orbigny, 1839).
- ⁸⁴ Includes specimens reported as *Ammonia beccarii* (Linné, 1758).
- ⁸⁵ Molecular data indicate "species level differences" between the white and pink forms of *Globigerinoides ruber* (Darling et al. 1997).
- ⁸⁶ Record reported to BKSG by personal communication from C. A. Brunner, University of Southern Mississippi.
- ⁸⁷ A name change from *Globorotalia menardii* (Parker, Jones, & Brady, 1865) to *Globorotalia cultrata* (d'Orbigny, 1839), as suggested by some authors, is controversial. Virtually all reports of the species from GMx (where it is abundant) mention it as *G. menardii*.
- ⁸⁸ Also reported as *Globigerina eggeri* Rhumbler, 1901, a junior synonym.