Table S32. Distribution of coarse sediments and macroinfauna on the Mississippi-Alabama continental shelf during winter and summer along three transects. C = western transect near Chandeleur Islands; M = middle transect south of Mobile Bay; D = eastern transect near DeSoto Canyon. (From Harper 1991; Darnell 1991a, b.)

Depth (m)	Winter				Summer			
	C	M	D	Avg.	C	M	D	Avg.
Sand and Gravel (%)								
20	52.4	83.8	75.8	70.7	59.1	94.7	94.9	82.9
50	37.7	90.4	93.1	73.7	23.4	91.0	91.3	68.6
100	4.5	60.5	62.6	42.5	10.8	57.9	77.1	48.6
200	0.3	4.8	4.6	3.2	0.5	5.8	7.4	4.6
Avg.	23.7	59.9	59.0	47.5	23.5	62.4	67.7	51.2
Total invertebrates (no./m²)								
20	1,642	1,601	1,111	1,451	505	1,683	1,822	1,337
50	316	750	832	633	311	1,701	922	978
100	291	415	871	526	326	404	967	566
200	946	183	182	457	152	402	185	246
Avg.	794	737	749	762	324	1,048	974	782
Polychaetes (no./m²)								
20	1,180	1,090	486	912	293	854	823	657
50	178	305	490	324	233	732	594	520
100	193	259	601	351	243	262	630	378
200	915	116	89	373	80	305	93	159
Avg.	617	443	417	492	212	538	535	428
Mollusks (no./m²)								

20	123	127	174	141	89	527	407	341
50	46	214	115	125	11	653	73	246
100	32	80	23	45	20	63	38	40
200	14	7	10	10	26	27	9	21
Avg.	54	107	81	81	37	318	132	162

Crustaceans (no./m²)

20	282	136	224	214	75	125	494	231
50	72	172	143	129	49	198	109	119
100	35	27	146	69	37	12	140	63
200	7	17	21	15	9	20	28	19
Avg.	99	88	134	107	43	89	193	108

Table S33. Measured or estimated macroinfaunal biomass values for several continental shelf areas around the Gulf of Mexico based on assumptions that the average wet weight of macroinfaunal organisms is 4.0 mg and that carbon is 4.3% of wet weight. Estimated values are marked by asterisks. (Data from Darnell 1991a; Escobar-Briones and Soto 1997; Flint and Rabalais 1980; Harper 1991; Harper, Potts, et al. 1981: McKinney, Nance, and Harper 1985; Rowe and Menzel 1971; Rowe, Polloni, and Horner 1974; Soto and Escobar-Briones 1995.)

		Biomass	
Depth (m)	Density (no./m^2)	Wet weight (g/m^2)	Organic carbon (mg C/m^2)
Alabama/Mississippi shelf			
20	1,394	10.630	457.1*
50	806	6.663	286.4*
100	546	8.190	352.2*
200	352	5.510	236.9*
Louisiana shelf			
10	2,599	10.396*	447.0*
Upper Texas shelf			
20	5,800	23.200*	997.6*
90	246	0.983	42.3*
South Texas shelf			
0–39	2,901	11.604*	499.0*
40–89	479	1.916*	82.4*
90–140	394	1.576*	67.8*

Mexico: Rio Grande-Tampico			
16–50	--	--	1,666
51–100	--	--	281
101–207	--	--	229
Mexico: Río Papaloapan to base of Yucatán Peninsula			
< 50	--	--	1,500
50–100	--	--	40
> 100	--	--	20
Mexico: Yucatán outer shelf			
185–295	--	7.060	303.6*

Table S34. Species representative of the depth-related macrofaunal assemblages of the continental shelf off peninsular Florida. (Data from Defenbaugh 1976; T. S. Hopkins 1979.)

Inner shelf assemblage (4–20 m)

Cnidaria

Leptogorgia virgulata

Gastropoda

Anachis semiplicata

Fasciolaria lilium

Mitrella lunata

Bivalvia

Argopecten irradians

Brachidontes exustus

Chione cancellata

Glycymeris pectinata

Musculus lateralis

Pycnogonida

Anoplodactylus insignis

Natantia

Penaeus duorarum

Brachyura

Libinia dubia

Metaporhaphis calcarata

Podochela riisei

Portunus gibbesii

Echinodermata

Echinaster spinulosus

Luidia clathrata

Lytechinus variegatus

Mellita quinquiesperforata

Ophiothrix angulata

Intermediate shelf assemblage (20–60 m)

Porifera

Haliclona viridis

Ircinia strombilina

Spheciospongia vesparia

Brachyura

Dromia antillensis

Palicus alternatus

Parthenope serrata

Portunus spinicarpus

Gastropoda

Stenorhynchus seticornis

Fasciolaria lilium

Murex cabriti

Echinodermata

Vermicularia spirata

Arbacia punctulata

Astropecten duplicatus

Bivalvia

Encope michelini

Argopecten gibbus

Eucidaris tribuloides

Laevicardium pictum

Luidia clathrata

Lyonsia beana

Ophiolepis elegans

Outer shelf assemblage (60–120 m)

Bivalvia

Brachyura

Argopecten gibbus

Anasimus latus

Calappa sulcata

Natantia

Portunus spinicarpus

Mesopenaeus tropicalis

Raninoides louisianensis

Parapenaeus longirostris

Synalpheus townsendi

Echinodermata

Astroporpa annulata

Clypeaster ravenelli

Upper slope assemblage (120–200 m)

Annelida

Natantia

Protula tubularia

Parapenaeus longirostris

Gastropoda

Brachyura

Murex beauii

Acanthocarpus alexandri

Polystira albida

Bivalvia

Aequipecten glyptus

Nemocardium peramabile

Myropsis quinquespinosa

Portunus spinicarpus

Raninoides louisianensis

Echinodermata

Astropecten cingulatus

Echinocardium flavescens

Table S35. Distribution of macroepifauna on the Mississippi-Alabama continental shelf during summer and winter along three transects. C = western transect near Chandeleur Islands; M = middle transect south of Mobile Bay; D = eastern transect near DeSoto Canyon. (From Harper 1991; Darnell 1991a, b.)

Total invertebrates (no./ha)								
	Winter				Summer			
Depth (m)	C	M	D	Avg.	C	M	D	Avg.
20	205	238	207	217	595	207	309	370
50	95	324	99	173	972	363	479	605
100	533	226	312	357	1,019	220	461	567
200	1,627	878	416	974	913	348	108	456
Avg.	615	417	259	430	875	285	339	500
Decapods (no./ha)								
20	146	216	131	164	386	119	50	185
50	62	318	47	142	786	315	279	460
100	495	205	192	297	806	104	251	387
200	1,502	828	69	800	438	222	24	228
Avg.	551	392	110	351	604	190	151	315
Echinoderms (no./ha)								
20	7	6	58	24	88	14	146	83
50	12	38	27	26	25	22	159	69
100	2	1	100	34	178	16	103	99
200	98	4	302	135	351	14	30	132
Avg.	30	12	122	55	161	17	110	96
Mollusks (no./ha)								

20	14	14	17	15	95	70	114	93
50	21	10	25	19	81	24	31	45
100	21	11	5	12	23	91	93	69
200	26	36	42	34	125	103	54	94
Avg.	20	18	22	20	81	72	73	75

Table S36. Species representative of the Pro-Delta fan macrofaunal assemblage on both sides of the Mississippi River Delta on soft bottoms in the depth range of 4–20 m. (After Defenbaugh 1976; R. Parker 1960.)

Cnidaria	**Natantia**
Renilla mulleri	*Penaeus aztecus*
	Penaeus setiferus
Gastropoda	*Trachypenaeus similis*
Cantharus cancellarius	
Nassarius acutus	**Brachyura**
	Callinectes similis
Bivalvia	*Persephona crinita*
Abra lioica	*Portunus gibbesii*
Macoma tageliformis	*Portunus spinimanus*
Nuculana concentrica	
	Stomatopoda
	Squilla empusa

Table S37. Species representative of the depth-related macrofaunal assemblages of the continental shelf off Alabama, Mississippi, Louisiana, and Texas. (Data from Defenbaugh 1976.)

Inner shelf assemblage (4–20 m)

Cnidaria

Astrangia astreiformis
Palythoa texaensis
Renilla mulleri

Annelida

Diopatra cuprea
Onuphis eremita

Gastropoda

Anachis obesa
Architectonica nobilis
Busycon spiratum
Cantharus cancellarius
Nassarius acutus
Oliva sayana
Olivella mutica
Phalium granulatum
Polinices duplicatus
Terebra dislocata
Terebra protexta
Thais haemastoma

Bivalvia

Anadara ovalis

Natantia

Penaeus aztecus
Penaeus setiferus
Sicyonia brevirostris
Sicyonia dorsalis
Trachypenaeus similis

Brachyura and Anomura

Calappa sulcata
Callinectes sapidus
Callinectes similis
Hepatus epheliticus
Libinia emarginata
Pagurus pollicaris
Persephona aquilonaris
Persephona crinata
Persephona punctata
Portunus gibbesii
Portunus spinimanus

Stomatopoda

Squilla empusa

Echinodermata

Luidia clathrata

Anadara transversa
Atrina serrata
Corbula swiftiana
Dinocardium robustum
Dosinia discus
Noetia ponderosa
Nuculana concentrica
Mellita quinquiesperforata
Ophiolepis elegans

Intermediate shelf assemblage (20–60 m)

Annelida

Diopatra cuprea

Gastropoda

Busycon contrarium
Conus austini
Distorsio clathrata
Fasciolaria lilium
Murex fulvescens
Pleurobranchaea hedgpethi
Polystira albida
Strombus alatus
Tonna galea

Bivalvia

Amusium papyraceum
Argopecten gibbus
Chione clenchi
Gouldia cerina
Pitar cordatus
Tellina nitens

Brachyura and Anomura

Anasimus latus
Calappa sulcata
Callinectes similis
Hepatus epheliticus
Libinia emarginata
Parthenope serrata
Persephona crinata
Petrochirus diogenes
Portunus gibbesii
Portunus spinicarpus
Portunus spinimanus

Stomatopoda

Squilla chydaea
Squilla empusa

Echinodermata

Astropecten duplicatus
Clypeaster ravenelli
Encope michelini

Tellina squamifera

Natantia

Penaeus aztecus

Penaeus setiferus

Sicyonia brevirostris

Sicyonia dorsalis

Trachypenaeus similis

Luidia alternata

Luidia clathrata

Ophiolepis elegans

Stylocidaris affinis

Outer shelf assemblage (60–120 m)

Gastropoda

Distorsio clathrata

Polystira albida

Turritella exoleta

Bivalvia

Amusium papyraceum

Anadara baughmani

Anadara floridana

Argopecten gibbus

Pitar cordatus

Verticordia ornata

Natantia

Parapenaeus longirostris

Penaeus aztecus

Sicyonia brevirostris

Trachypenaeus similis

Brachyura and Anomura

Anasimus latus

Calappa springeri

Calappa sulcata

Leiolambrus nitidus

Munida forceps

Myropsis quinquespinosa

Portunus spinicarpus

Raninoides louisianensis

Stomatopoda

Squilla chydaea

Echinodermata

Astropecten cingulatus

Astropecten duplicatus

Brissopsis atlantica

Echinocardium fulvescens

Upper slope assemblage (120–200 m)

Annelida

Protula tubularia

Gastropoda

Murex beauii

Polystira albida

Sconsia striata

Bivalvia

Cyclocardia armilla

Cyclopecten nanus

Limopsis sulcata

Nemocardium peramabile

Yolida solinoides

Natantia

Hymenopenaeus tropicalis

Parapenaeus longirostris

Solenocera vioscai

Brachyura and Anomura

Acanthocarpus alexandri

Anasimus latus

Calappa sulcata

Iliacantha subglobosa

Munida forceps

Myropsis quinquespinosa

Parthenope agona

Portunus spinicarpus

Pyromaia arachna

Raninoides louisianensis

Thalassoplax angusta

Stomatopoda

Squilla chydaea

Echinodermata

Anthenoides piercei

Astropecten nitidus

Brissopsis alta

Brissopsis atlantica

Cheiraster echinulatus

Echinocardium flavescens

Table S38. Macroepifaunal invertebrate species reported from terrigenous bottoms of the continental shelf off eastern Mexico from the Rio Grande to the base of the Yucatán Peninsula. Names not followed by parentheses were reported by Hildebrand alone. Those followed by (D) were reported by Defenbaugh alone. Those followed by (b) were reported by both authors. (Data from Defenbaugh 1976; H. Hildebrand 1954.)

Cnidaria

Calliactis tricolor
Distochopus gracile (D)
Hypnogorgia nutans (D)
Paramuricea multispina (D)
Renilla mulleri (D)
Scleracis guadalupensis (D)
Tamoya haplonema (D)
Telesto riisei (D)

Bivalvia

Aequipecten muscosis (D)
Amusium papyraceum (D)
Anadara baughmani
Argopecten gibbus (D)
Mercenaria campechiensis
Ostrea equestris (b)
Pecten ravenelli (D)

Gastropoda

Busycon coarctatum
Busycon contrarium (b)
Busycon perversum
Conus austini

Macrura

Scyllarus chacei (D)

Anomura

Dardanus insignis (D)
Paguristes moorei (D)
Paguristes triangulatus (D)
Petrochirus diogenes (D)
Porcellana sayana (b)

Brachyura

Anasimus latus (b)
Arenaeus cribrarius
Calappa flammea (D)
Calappa sulcata (D)
Callinectes sapidus
Callinectes similis (D)
Euphrosynoplax clausa (D)
Hepatus epheliticus (D)
Iliacantha liodactylus (D)
Leiolambrus nitidus (D)
Libinia emarginata
Myropsis quinquespinosa (D)
Parthenope serrata (D)

Conus sennottorum (D)
Crepidula fornicata (D)
Crucibulum auricula (D)
Distorsio clathrata (D)
Eudolium crosseanum
Fasciolaria distans
Fasciolaria gigantea
Fusinus couei
Murex fulvescens
Murex pomum
Phalium granulatum
Pleurbranchaea hedgpethi (D)
Polystira albida (b)
Scaphella junonia (D)
Sconsia striata (D)
Tonna galea

Cephalopoda

Loligo brevis (D)
Loligo pealei (D)
Loligo plei (D)
Octopus vulgaris

Natantia

Parapenaeus longirostris (D)
Penaeus aztecus (b)
Penaeus duorarum (b)
Penaeus setiferus (b)
Sicyonia brevirostris (b)
Sicyonia dorsalis (b)
Persephona punctata
Portunus gibbesii
Portunus spinicarpus (b)
Portunus spinimanus (b)
Pseudorhombilia quadridentata (D)
Raninoides louisianensis (D)
Stenorhynchus seticornis (D)

Stomatopoda

Lysiosquilla scabricauda
Squilla chydaea (D)
Squilla empusa (D)

Echinodermata

Astropecten antillensis
Astropecten cingulatus (b)
Astropecten duplicatus (D)
Clypeaster ravenelli (D)
Comactinia echinoptera (D)
Encope michelini (D)
Holothuria princeps (D)
Luidia clathrata (b)
Stichopus badinotus (D)
Tethyaster grandis (D)
Tethyaster magnificus

Bryozoa

Cupuladria canariensis (D)
Hippoporidra calcarata (D)

Sicyonia stimpsoni (D)	**Urochordata**
Sicyonia typica (b)	*Eudistoma hepaticum* (D)
Solenocera vioscai (b)	*Pyura vittata* (D)
Trachypenaeus similis (b)	*Styela plicata* (D)

Table S39. Macroepifaunal invertebrate species reported from calcareous bottoms of the continental shelf west of the Yucatán Peninsula. Names not followed by parentheses were reported by Hildebrand alone. Those followed by (D) were reported by Defenbaugh alone. Those followed by (b) were reported by both authors. (Data from Defenbaugh 1976; Hildebrand 1955.)

Porifera	**Cephalopoda**
Axinella polycapella	*Loligo pealei*
Haliclona rubens	*Octopus vulgaris* (b)
Higginsia strigilata	
Ircinia campana	**Natantia**
Ircinia ramosa	*Penaeus aztecus*
Oligoceras collectrix	*Penaeus duorarum* (b)
Placospongia melobesoides (b)	*Penaeus setiferus*
Spheciospongia vesparia	*Sicyonia brevirostris* (b)
Thalysias juniperina	*Sicyonia dorsalis*
	Sicyonia typica (D)
Bivalvia	*Solenocera atlantidis*
Anadara lienosa	*Trachypenaeus constrictus*
Anodontia alba	
Anomia simplex (D)	**Anomura**
Arca zebra	*Petrochirus bahamensis*
Argyropecten irradians	*Petrochirus diogenes* (D)
Atrina serrata	*Porcellana sayana*
Chione cancellata	
Chione intrapurpurea	**Brachyura**
Chione latilirata	*Calappa flammea* (b)
Dinocardium robustum	*Callinectes similis*
Dosinia elegans	*Dromia antillensis*

Echinochama cornuta
Laevicardium laevigatum
Macrocallista maculata
Mercenaria campechiensis
Modiolus americanus
Ostrea equestris (b)
Pteria colymbus

Gastropoda

Busycon coarctatum
Busycon perversum
Busycon spiratum
Cancellaria reticulata
Cassis madagascarensis
Conus spurius
Crepidula aculeata
Crepidula fornicata
Crepidula plana
Crucibulum auricula (D)
Distorsio clathrata
Fasciolaria lilium
Fasciolaria tulipa
Ficus communis
Fusinus couei
Murex florifer
Murex fulvescens
Murex pomum (b)
Natica carena
Oliva sayana
Phalium granulatum
Hepatus epheliticus
Libinia dubia
Parthenope serrata (b)
Persephona punctata
Podochela riisei
Portunus gibbesii (b)
Portunus spinimanus (b)

Stomatopoda

Lysiosquilla scabricauda
Squilla empusa (b)

Echinodermata

Arbacia punctulata
Astichopus multifidus
Astropecten articulatus
Astropecten cingulatus (D)
Astropecten duplicatus (D)
Clypeaster subdepressus
Echinaster echinophorus
Encope michelini
Luidia clathrata (b)
Lytechinus variegatus
Ophiolepis elegans (D)
Oreaster reticulatus
Plagiobrissus grandis
Thyone briareus

Bryozoa

Cupuladria canariensis (D)

Pleuroploca gigantea

Scaphella junonia

Strombus alatus

Strombus costatus

Xancus angulatus

Urochordata

Amaroucium stellatum

Clavelina oblonga (D)

Eudistoma capsulatum

Microcosmus exasperatus

Styela plicata

Table S40. Partitioning of benthic biomass and ratios of one compartment to another for continental shelves of the western and southern Gulf of Mexico. (Data from Escobar-Briones and Soto 1997; Soto and Escobar-Briones 1995.)

	Benthic compartments				
Depth (m)	Bacteria	Meiofauna	Macroinfauna	Macroepifauna	Total benthos
Western Gulf – Rio Grande to Tampico					
Biomass (g C/m^2)					
16–50	--	1.117	1.666	0.009	2.792
51–100	--	0.399	0.281	0.008	0.688
101–224	--	0.123	0.229	0.006	0.358
Average	--	0.546	0.725	0.008	1.279
Ratios					
16–50	--	124:	185:	1	
51–100	--	50:	35:	1	
101–224	--	21:	38:	1	
Average	--	65:	86:	1	
Southern Gulf – Veracruz to base of Yucatán Peninsula					
Biomass (g C/m^2)					
< 50	1.5	0.7	1.5	0.02	3.72
51–150	0.7	0.2	0.4	0.01	1.31
> 150	0.3	0.1	0.2	0.01	0.61
Average	0.8	0.3	0.7	0.01	1.88
Ratios					
< 50	75:	35:	75:	1	
51–150	70:	20:	40:	1	
> 150	30:	10:	20:	1	
Average	58.3:	21.7:	45:	1	

Table S41. Genera of marine algae recorded from shoreline zones and subzones of the Florida Keys. See text for definition of zones and subzones. (Data from Stephenson and Stephenson 1950.)

	Supralittoral			Littoral		Sublittoral
Genera of marine algae	white	gray	black	yellow	lower platform	reef flat
Green algae						
Anadyomene				X		X
Caulerpa						X
Cladophora						X
Cladophoropsis				X	X	
Halimeda					X	X
Penicillus						X
Udotea						X
Valonia				X	X	X
Brown algae						
Dictyosphaeria						X
Dictyota						X
Padina						X

Sargassum					X
Red algae					
Bostrychia	X	X	X		
Catenella			X		
Centroceras			X	X	X
Ceramium			X	X	
Crouania					X
Eucheuma					X
Gelidium			X		
Herposiphonia				X	
Heterosiphonia			X		
Jania				X	X
Laurencia				X	X
Polysiphonia		X	X	X	
Spyridia			X	X	X

Table S42. Genera of marine animals recorded from shoreline zones and subzones of the Florida Keys. See text for definition of zones and subzones. (Data from Stephenson and Stephenson 1950.)

Genera of marine animals	Supralittoral			Littoral		Sublittoral
	white	gray	black	yellow	lower platform	reef flat
Porifera						
Ircinia						X
Spheciospongia						X
Cnidaria						
Soft corals						
Briareum						X
Eunicea						X
Plexaurella						X
Xiphigorgia						X
Anemones						
Aiptasia					X	X
Condylactis					X	X
Phymanthus					X	X
Palythoa						X
Zoanthus					X	X
Stony corals						
Diploria						X
Manicina						X
Millepora						X
Porites						X
Siderastrea						X

Mollusca						
Chitons						
Acanthopleura				X		
Ischnochiton						X
Gastropods						
Acmaea				X		
Astraea						X
Batillaria			X	X		
Cantharus				X		
Cerithium						X
Dendropoma				X		
Detracia		X	X	X		
Diodora				X		
Echinella		X	X			
Fasciolaria						X
Littorina		X				
Melampus		X	X			
Nerita		X	X	X		
Nodilittorina		X	X			
Onchidium				X		
Planaxis			X			
Siphonaria				X		
Strombus						X
Tectarius		X	X			
Tegula						X
Thais				X		
Truncatella		X				
Bivalves						
Arca					X	X
Brachiodontes				X		X
Isognomon				X		
Crustacea						
Isopods						
Ligia	X	X	X			
Barnacles						
Chthamalus				X		
Tetraclita				X		
Crabs						

Microphrys				X
Pachygrapsus	X	X		
Echinodermata				
Starfishes				
Linckia				X
Oreaster				X
Sea urchins				
Clypeaster				X
Echinometra			X	X
Lytechinus				X
Tripneustes				X
Sea cucumbers				
Holothuria				X

Table S43. Development of the biofouling mat on offshore oil and gas structures in relation to distance from shore. (From Darnell and Schmidly 1988, after Gallaway and Lewbel 1982.)

	Depth range			
	Coastal	Transitional		Blue water
Measure	(0–20 m)	(20–30 m)	30–60 m	(> 60 m)
Biomass range (kg/m^2)	5.4–15.5	1.9–10.9	--	1.0–5.0
Biomass averages (kg/m^2)				
– near surface (0–2 m)	9.5	5.6	8.5–11.0	--
– deep (10–13 m)	13.5	2.9	2.0	--
Mat thickness (cm)	up to 12.0	--	--	2.0–4.0
Dominant groups (1 m below surface)				
– barnacles	92%	--	27%	6%
– bivalves	3%	--	65%	92%

Table S44. Percentage composition of biofouling communities in relation to depth below surface and distance from shore. (Modified from Gallaway and Lewbel 1982.)

	Depth range		
Taxonomic group	Coastal (0–20 m)	Transitional (20–60 m)	Blue water (> 60 m)
1 m below surface			
sea anemones	4	--	--
bivalves	3	65	92
barnacles	92	27	6
ophiuroids	--	8	1
other	1	< 1	1
10 m below surface			
sea anemones	--	1	--
bivalves	10	93	97
barnacles	88	5	2
other	2	< 1	1
20 m below surface			
sea anemones	--	1	--
bivalves	--	99	> 99
other	--	< 1	< 1
30 m below surface			
sea anemones	--	--	4
bivalves	--	--	89
amphipods	--	97	6
ophiuroids	--	3	1

Table S45. Vertical zonation of sponge species on legs of an oil platform in 125 m of water on the outer continental shelf of the north-central Gulf. (From C. C. Adams 1996.)

Species	Depth (m)					
	0–6	7–12	13–18	19–24	25–30	31–37
Anchorinidae sp.	X					
Suberites sp.	X		X			
Haliclona molitba	X			X		
Chelonaplysilla cf. *erecta*	X	X		X	X	
Phorbas amaranthus	X	X			X	
Dysiodes janiae	X	X	X	X	X	
Rhaphidophlus schoenus	X	X	X	X		X
Desmacella meliorata	X	X	X		X	X
Stelletta kallitetilla	X	X	X	X	X	X
Tedania ignis	X	X	X	X	X	X
Geodia gibberosa		X				
Callyspongia vaginalis		X			X	
Ircinia felix		X	X	X		X
Clathrina coriacea			X		X	X
Acarnus souriei			X	X		X
Neofibularia nolitangere			X	X	X	X
Dactyonella ruetzleri				X	X	
Clathria echinata				X	X	
Halichondria cf. *magniconulosa*						X

Table S46. Accumulation of organic biomass (g/m^2) on plastic floats set out off Panama City, Florida, in relation to distance from shore, depth, length of exposure, and season. Variables include two stations (2 mi and 11 mi), several depths, four lengths of exposure (2, 3, 8, and 14 weeks), and two seasons (summer and winter). (Data from W. Pequegnat and L. Pequegnat 1968.)

	Organic biomass accumulation (g/m^2)							
	Summer (May–Aug) weeks of exposure				Winter (Nov–Feb) weeks of exposure			
Depth (m)	2	4	8	14	2	4	8	14
2 mi station								
4	31	18	66	129	0.4	12	107	126
10	15	15	31	54	0.3	24	43	101
17	11	15	16	29	2.0	23	134	138
Total	57	48	113	212	2.7	59	284	365
11 mi station								
4	5	64	142	330	3	37	98	68
10	6	41	112	377	4	52	81	108
17	4	52	81	408	3	58	57	171
29	10	32	124	65	5	41	74	235
Total	25	189	459	1,180	15	188	310	576

Table S47. Depth ranges (m) of biotic zones on hard banks of the continental shelf of the northwestern Gulf of Mexico. "P" indicates the zone is present but depth limits are not known. Uncertain depths are noted by question marks. (Modified from Rezak, Gittings, and Bright 1990.)

Banks	Biotic zones							
	Diploria-Montastrea-Porites	Madracis	Stephano-coenia-Millepora	Algal-sponge	Millepora-sponge	Antipatharian	Nepheloid	Soft bottom
East Texas–Louisiana midshelf banks								
Claypile					40–45		45+	50+
Sonnier					18–52		52+	60+
Stetson					20–52		52+	62–64+
32-Fathom						52?	P	55+
Coffee lump						62–68	68+	70+
Fisher						66–73	73+	78+
South Texas midshelf banks								
Small Adam						60?	P	64+
Big Adam						60?	P	66+
North Hospital						58–70	70+	68–70+
Aransas						57–70	70+	70–72+
Baker						56–70	70+	70–74+
Blackfish						60?	P	70–74+
Hospital Rock						59–70	70+	70–74+

Mysterious						70?	P	74–80+
Southern						58–70	70+	80+
Dream						62–70	70+	80+
South Baker						59–70	70+	80–84+
East Texas–Louisiana outer shelf banks								
Alderdice				55–67		67–82	82+	84–90+
Ewing				56–72		72–80	80+	85–100+
Bouma				60–75		75–84	84+	90–100+
Parker				60–82		82–?	P	100+
Sackett				67–82		65–85	85+	100+
E. Flower Garden	15–36	28–46	36–52	46–82		82–86	86+	100–120+
Appelbaum				76?		P	P	100–120+
Bright			37	52–74		74–?	P	110+
W. Flower Garden	20–36	P	36–50	46–88		88–89	89+	110–130+
Diaphus						73–98	98+	110–130+
18-Fathom			45–47	45–82		82–?	P	110–130+
28-Fathom				52–92		92–100	100+	110–140+
Jakkula				59–90		90–98	98+	120–140+
Rezak-Sidner				55–93		93–100	100+	120–150+
Sweet				75–80+		P	P	130–200+
Elvers				60–97		97–123	123+	180+
Geyer				60–98	37–52	98–123?	123+	190–210+

Phleger	?	122+	200+

Table S48. Patterns of depth distribution in the sponges, soft corals, and stony corals collected on the southern half of the west Florida continental shelf. (Data from Environmental Science and Engineering, Inc., LGL Ecological Research Associates, Inc., and Continental Shelf Associates, Inc. 1987.)

	Depth range (m)				
Group	13–19	20–32	40–58	62–77	129–159
Number of species					
Sponges (74 spp.)	44	49	46	42	8
Soft corals (71 spp.)	30	19	13	25	22
Stony corals (54 spp.)	18	26	15	19	16
Percentages of total species in group					
Sponges	59.5	66.2	62.2	56.8	10.8
Soft corals	42.3	26.8	18.3	35.2	31.0
Stony corals	33.3	48.1	27.8	35.2	29.6

Table S49. Ages and growth rates of selected reefs off southeast Florida. Age is given in years before present (YBP). (From Shinn 1980; Shinn et al. 1977.)

Reef	Base age (YBP) (with confidence limits)	Accretion (m)	Growth rate (m/1,000 yr)
Long Key	5,630±120	5.0	0.65
Carysfort	5,250±85	7.3	0.86–4.85
Green Rocks	5,950±100	9.5	6–8
Bahia Honda	7,160±85	4.6–8.2	1.14
Looe Key	6,580±90	7.3	1.12
Bird Key	6,017±90	13.7	1.36–4.85

Table S50. Common and abundant bird species reported from mangrove areas of south Florida, giving season of occurrence and general abundance. Uncommon and rare species are not listed. Some species such as the bald eagle and peregrine falcon, although generally rare, are included because they are common locally. Yr = year-round resident; S = summer resident; W = winter resident; T = transient (present primarily during the spring and fall migration); A = abundant; C = common. (Modified from Odum, McIvor, and Smith 1982.)

Common name	Scientific name	Season of occurrence	Abundance	
			A	C
Wading birds				
Great egret	*Casmerodius albus*	Yr		X
Snowy egret	*Egretta thula*	Yr		X
Cattle egret	*Bubulcus ibis*	Yr		X
Great blue heron	*Ardea herodias*	Yr		X
Louisiana heron	*Hydranassa tricolor*	Yr		X
Little blue heron	*Florida caerulea*	Yr		X
Green heron	*Butorides striatus*	Yr		X
Black-crowned night heron	*Nycticorax nycticorax*	Yr		X
Yellow-crowned night heron	*Nyctanassa violacea*	Yr		X
Wood stork	*Mycteria americana*	Yr		X
Wood ibis	*Eudocimus albus*	Yr	X	
Probing shorebirds				
King rail	*Rallus elegans*	Yr		X
Semipalmated plover	*Charadrius semipalmatus*	W, T		X
Wilson's plover	*Charadrius wilsonia*	W, T		X
Black-bellied plover	*Pluvialis squatarola*	W		X
Ruddy turnstone	*Arenaria interpres*	W		X

Long-billed curlew	*Numenius americanus*	W, T		X
Spotted sandpiper	*Actitis macularia*	W, T	X	
Solitary sandpiper	*Tringa solitaria*	W, T		X
Willet	*Catoptrophorus semipalmatus*	Yr		X
Greater yellowlegs	*Tringa melanoleucas*	W, T		X
Lesser yellowlegs	*Tringa flavipes*	W, T		X
Dunlin	*Calidris alpina*	W		X
Least sandpiper	*Calidris minutilla*	W, T		X
Short-billed dowitcher	*Limnodromus griseus*	W, T		X
Stilt sandpiper	*Micropalama himantopus*	W, T		X
Semipalmated sandpiper	*Calidris pusilla*	W, T	X	
Marbled godwit	*Limosa fedoa*	W		X
Black-necked stilt	*Himantopus mexicanus*	S		X

Floating and diving waterbirds

Pied-billed grebe	*Podilymbus podiceps*	Yr		X
White pelican	*Pelecanus erythrorhynchus*	W		X
Brown pelican	*Pelecanus occidentalis*	Yr		X
Double-crested cormorant	*Phalacrocorax auritus*	Yr		X
Anhinga	*Anhinga anhinga*	Yr		X
Pintail	*Anas acuta*	W, T	X	
Green-winged teal	*Anas creca*	W, T		X
Blue-winged teal	*Anas discors*	Yr	X	
American widgeon	*Anas americana*	W, T		X
Northern shoveler	*Anas clypeata*	W, T		X
Ringed-necked duck	*Aythya collaris*	W	X	
Lesser scaup	*Aythya affinis*	W	X	
Ruddy duck	*Oxyura jamaicensis*	W		X
Red-breasted merganser	*Mergus serrator*	W, T		X
Common gallinule	*Gallinula chloropus*	Yr		X

American coot	*Fulica americana*	W, T	X	
Aerially searching birds				
Ring-billed gull	*Larus delawarensis*	W, T		X
Laughing gull	*Larus atricilla*	Yr		X
Forster's tern	*Sterna fosteri*	W		X
Lesser tern	*Sterna albifrons*	S		X
Royal tern	*Thalasseus maxima*	W, T		X
Black skimmer	*Rhynchops nigra*	Yr		X
Belted kingfisher	*Megaceryle alcyon*	Yr		X
Fish crow	*Corvus ossifragus*	Yr		X
Birds of prey				
Magnificent frigate bird	*Fregata magnificens*	Yr		X
Turkey vulture	*Cathartes aura*	Yr		X
Black vulture	*Coragyps atratus*	Yr		X
Swallow-tailed kite	*Elanoides forficatus*	S		X
Red-shouldered hawk	*Buteo lineatus*	Yr		X
Bald eagle	*Haliaeetus leucocephalus*	Yr		X
Osprey	*Pandion haliaetus*	Yr		X
Peregrine falcon	*Falco peregrinus*	W		X
American kestrel	*Falco sparverius*	W		X
Arboreal birds				
Yellow-billed cuckoo	*Coccyzus americanus*	S		X
Red-bellied woodpecker	*Melanerpes carolinus*	Yr		X
Gray kingbird	*Tyrannus dominicensis*	S, T		X
Great-crested flycatcher	*Myiarchus crinitus*	Yr		X
Eastern phoebe	*Sayornis phoebe*	W		X
Eastern wood pewee	*Contopus virens*	S, T		X

Barn swallow	*Hirundo rustica*	W		X
Mockingbird	*Mimus polyglottos*	Yr	X	
Catbird	*Dumetella carolinensis*	W, T		X
American robin	*Turdus migratorius*	W	X	
Black-and-white warbler	*Mniotilla varia*	W, T		X
Yellow-throated warbler	*Dendroica dominica*	W		X
Yellow warbler	*Dendroica petechia*	Yr		X
Yellow-rumped warbler	*Dendroica coronata*	W, T	X	
Palm warbler	*Dendroica palmarum*	W, T	X	
Cape May warbler	*Dendroica tigrina*	T		X
Black-throated blue warbler	*Dendroica caerulescens*	T		X
Northern waterthrush	*Seiurus novaboracensis*	T	X	
Yellowthroat	*Geothlypus trichas*	Yr		X
American redstart	*Setophaga ruticilla*	T		X
Orange-crowned warbler	*Vermivora celata*	W		X
Northern parula	*Parula americana*	W		X
Ovenbird	*Seiurus aurocapillus*	W		X
Kentucky warbler	*Oporonis formosus*	T		X
Yellow-breasted chat	*Icteria virens*	W		X
Wilson’s warbler	*Wilsonia pusilla*	T		X
Red-winged blackbird	*Agelaius phoeniceus*	Yr		X
Cardinal	*Cardinalis cardinalis*	Yr		X
Rufous-sided towhee	*Pipilo erythrophthalmus*	Yr		X
Swamp sparrow	*Melospiza georgiana*	W, T		X