

# Biology Map 1 Gulf of Mexico Offshore ESI



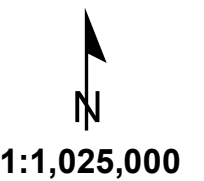
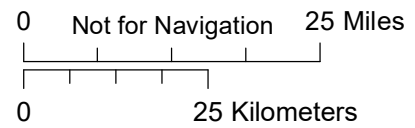
Bureau of Safety and  
Environmental Enforcement

- Benthic
- Birds
- Fish
- Herpetofauna
- Invertebrates
- Marine Mammals

- Benthic Points
- USCG Captain Of The Port Zones
- Bathymetry (Meters)
- US Exclusive Economic Zone
- AOI



**SEE MAP DATA TABLE**  
for Status, Seasonality, and Breed  
information about mapped species.  
Published: February 2023



Gulf of Mexico Offshore ESI: Biology Map 1

BIOLOGICAL RESOURCES:

BENTHIC:

RAR#	Species	S F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)
21	Stony branching coral		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
28	Black coral		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
37	Gorgonian corals		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
38	Sea pens		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
42	Gorgonian corals		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
	Sea pens		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
46	Soft coral		Solitary	Vulnerable Occurrence	J F M A M J J J A S O N D
59	Black coral		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
	Gorgonian corals		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
	Stony branching coral		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
	Stony cup coral		Solitary	Vulnerable Occurrence	J F M A M J J J A S O N D
93	Gorgonian corals		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
	Sea pens		Structure-Forming	Vulnerable Occurrence	J F M A M J J J A S O N D
	Stony cup coral		Solitary	Vulnerable Occurrence	J F M A M J J J A S O N D
164	Deep sea coral		0 To 1 Genera	General Distribution	J F M A M J J J A S O N D
165	Deep sea coral		>1 To 2 Genera	General Distribution	J F M A M J J J A S O N D
166	Deep sea coral		>2 To 4 Genera	General Distribution	J F M A M J J J A S O N D
167	Deep sea coral		>4 To 6 Genera	General Distribution	J F M A M J J J A S O N D
168	Deep sea coral		>6 To 8 Genera	General Distribution	J F M A M J J J A S O N D
228	Sargassum		-	General Distribution	M A M J J A S

BIRD:

RAR#	Species	S F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)	Nesting	Migrating	Molting
1	Audubon's shearwater		-	General Distribution	M A M J J J A S O N	-	-	-
	Band-rumped storm-petrel		-	General Distribution	M A M J J J A S O N	-	-	-
	Black tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Bonaparte's gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Bridled tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Brown booby		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Brown noddy		-	General Distribution	J J J A S O N	-	-	-
	Brown pelican		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Common loon		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Common tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Cory's shearwater		-	General Distribution	J J J A S O N	-	-	-
	Great shearwater		-	General Distribution	J J J A S O N	-	-	-
	Herring gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Laughing gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Magnificent frigatebird		-	General Distribution	M A M J J J A S O N	-	-	-
	Masked booby		-	General Distribution	M A M J J J A S O N	-	-	-
	Northern gannet		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Parasitic jaeger		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Pomarine jaeger		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Royal tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Sandwich tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Seabirds		High-Vessel Srvy Ppo	Concentration Area	J F M A M J J J A S O N D	-	-	-
	Sooty tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Wilson's storm-petrel		-	General Distribution	M A M J J J A S O N	-	-	-
2	Audubon's shearwater		-	General Distribution	M A M J J J A S O N	-	-	-
	Band-rumped storm-petrel		-	General Distribution	M A M J J J A S O N	-	-	-
	Black tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Bonaparte's gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Bridled tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Brown booby		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Brown noddy		-	General Distribution	J J J A S O N	-	-	-
	Brown pelican		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Common loon		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Common tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Cory's shearwater		-	General Distribution	J J J A S O N	-	-	-
	Great shearwater		-	General Distribution	J J J A S O N	-	-	-
	Herring gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Laughing gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Magnificent frigatebird		-	General Distribution	M A M J J J A S O N	-	-	-
	Masked booby		-	General Distribution	M A M J J J A S O N	-	-	-
	Northern gannet		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Parasitic jaeger		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Pomarine jaeger		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Royal tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Sandwich tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Seabirds		Low-Vessel Srvy Ppo	General Distribution	J F M A M J J J A S O N D	-	-	-
	Sooty tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Wilson's storm-petrel		-	General Distribution	M A M J J J A S O N	-	-	-
3	Audubon's shearwater		-	General Distribution	M A M J J J A S O N	-	-	-
	Band-rumped storm-petrel		-	General Distribution	M A M J J J A S O N	-	-	-
	Black tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Bonaparte's gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Bridled tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Brown booby		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Brown noddy		-	General Distribution	J J J A S O N	-	-	-
	Brown pelican		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Common loon		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Common tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Cory's shearwater		-	General Distribution	J J J A S O N	-	-	-
	Great shearwater		-	General Distribution	J J J A S O N	-	-	-
	Herring gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Laughing gull		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Magnificent frigatebird		-	General Distribution	M A M J J J A S O N	-	-	-
	Masked booby		-	General Distribution	M A M J J J A S O N	-	-	-
	Northern gannet		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Parasitic jaeger		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Pomarine jaeger		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Royal tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Sandwich tern		-	General Distribution	M A M J J J A S O N	-	-	-
	Seabirds		Med-Vessel Srvy Ppo	General Distribution	J F M A M J J J A S O N D	-	-	-
	Sooty tern		-	General Distribution	J F M A M J J J A S O N D	-	-	-
	Wilson's storm-petrel		-	General Distribution	M A M J J J A S O N	-	-	-
16	Black-capped petrel		High-Vessel Srvy Ppo	Concentration Area	F M A M J J J A S O N	-	-	-
17	Black-capped petrel		Low-Vessel Srvy Ppo	General Distribution	F M A M J J J A S O N	-	-	-
18	Black-capped petrel		Med-Vessel Srvy Ppo	General Distribution	F M A M J J J A S O N	-	-	-
249	Marine birds		High-Aerial Survey	Concentration Area	J J A	-	-	-
250	Marine birds		Low-Aerial Survey	General Distribution	J J A	-	-	-
251	Marine birds		Medium-Aerial Survey	General Distribution	J J A	-	-	-
253	Marine birds		High-Aerial Survey	Concentration Area	J F	-	-	-
254	Marine birds		Low-Aerial Survey	General Distribution	J F	-	-	-
255	Marine birds		Medium-Aerial Survey	General Distribution	J F	-	-	-

Species Threatened/Endangered



Gulf of Mexico Offshore ESI: Biology Map 1 (cont.)

BIOLOGICAL RESOURCES:

FISH:													
RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)							
19	Bluefin tuna			Bluefin Tuna Hapc	Spawning Area				A	M	J		
200	Giant manta		T	High Use Area	General Distribution	J	F	M	A	M	J	J	A
201	Giant manta		T	-	General Distribution	J	F	M	A	M	J	J	A
209	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A
	Cobia			-	General Distribution	J	F	M	A	M	J	J	A
	Dusky shark			-	General Distribution	J	F	M	A	M	J	J	A
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A
	King mackerel			-	General Distribution	J	F	M	A	M	J	J	A
	Red snapper			Common	General Distribution	J	F	M	A	M	J	J	A
	Sailfish			-	General Distribution				M	A	M	J	J
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A
	Scamp			-	General Distribution	J	F	M	A	M	J	J	A
	Silky shark			-	General Distribution	J	F	M	A	M	J	J	A
	Spinner shark			-	General Distribution	J	F	M	A	M	J	J	A
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A
	Yellowedge grouper			-	General Distribution	J	F	M	A	M	J	J	A
211	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A
	Bonnethead			-	General Distribution	J	F	M	A	M	J	J	A
	Bull shark			-	General Distribution	J	F	M	A	M	J	J	A
	Cobia			-	General Distribution	J	F	M	A	M	J	J	A
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A
	King mackerel			-	General Distribution	J	F	M	A	M	J	J	A
	Menhaden			-	General Distribution	J	F	M	A	M	J	J	A
	Red snapper			Common	General Distribution	J	F	M	A	M	J	J	A
	Sailfish			-	General Distribution				M	A	M	J	J
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A
	Scalloped hammerhead			-	General Distribution	J	F	M	A	M	J	J	A
	Spanish mackerel			-	General Distribution	J	F	M	A	M	J	J	A
	Spinner shark			-	General Distribution	J	F	M	A	M	J	J	A
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A
217	Oceanic whitetip shark		T	High Use Area	General Distribution	J	F	M	A	M	J	J	A
218	Oceanic whitetip shark		T	-	General Distribution	J	F	M	A	M	J	J	A
246	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A
	Dusky shark			-	General Distribution	J	F	M	A	M	J	J	A
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A
	King mackerel			-	General Distribution	J	F	M	A	M	J	J	A
	Red snapper			Common	General Distribution	J	F	M	A	M	J	J	A
	Sailfish			-	General Distribution				M	A	M	J	J
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A
	Scalloped hammerhead			-	General Distribution	J	F	M	A	M	J	J	A
	Scamp			-	General Distribution	J	F	M	A	M	J	J	A
	Silky shark			-	General Distribution	J	F	M	A	M	J	J	A
	Spinner shark			-	General Distribution	J	F	M	A	M	J	J	A
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A
	Yellowedge grouper			-	General Distribution	J	F	M	A	M	J	J	A
247	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A
	Bonnethead			-	General Distribution	J	F	M	A	M	J	J	A
	Bull shark			-	General Distribution	J	F	M	A	M	J	J	A
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A
	King mackerel			-	General Distribution	J	F	M	A	M	J	J	A
	Menhaden			-	General Distribution	J	F	M	A	M	J	J	A
	Red snapper			Common	General Distribution	J	F	M	A	M	J	J	A
	Sailfish			-	General Distribution				M	A	M	J	J
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A
	Scalloped hammerhead			-	General Distribution	J	F	M	A	M	J	J	A
	Spinner shark			-	General Distribution	J	F	M	A	M	J	J	A
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A
252	Albacore			-	General Distribution	J	F	M	A	M	J	J	A
	Bigeye thresher			-	General Distribution	J	F	M	A	M	J	J	A
	Bigeye tuna			-	General Distribution	J	F	M	A	M	J	J	A
	Blue marlin			-	General Distribution	J	F	M	A	M	J	J	A
	Bluefin tuna			-	General Distribution	J	F	M	A	M	J		
	Dusky shark			-	General Distribution	J	F	M	A	M	J	J	A
	Longbill spearfish			-	General Distribution	J	F	M	A	M	J	J	A
	Red snapper			-	General Distribution	J	F	M	A	M	J	J	A
	Sailfish			-	General Distribution				M	A	M	J	J
	Skipjack tuna			-	General Distribution	J	F	M	A	M	J	J	A
	Swordfish			-	General Distribution	J	F	M	A	M	J	J	A
	Tilefish spp.			-	General Distribution	J	F	M	A	M	J	J	A
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A
	White marlin			-	General Distribution	J	F	M	A	M	J	J	A
	Yellowedge grouper			-	General Distribution	J	F	M	A	M	J	J	A
	Yellowfin tuna			-	General Distribution	J	F	M	A	M	J	J	A

HERPETOFAUNA:													
RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)							
180	Green sea turtle		T	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
	Kemp's ridley sea turtle		E	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
	Loggerhead sea turtle		T	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
182	Green sea turtle		T	High Use Area	Concentration Area	J	F	M	A	M	J	J	A
183	Green sea turtle		T	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
185	Kemp's ridley sea turtle		E	High Use Area	Concentration Area	J	F	M	A	M	J	J	A
186	Kemp's ridley sea turtle		E	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
196	Leatherback sea turtle		E	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
197	Leatherback sea turtle		E	-	General Distribution	J	F	M	A	M	J	J	A
198	Loggerhead sea turtle		T	High Use Area	Concentration Area	J	F	M	A	M	J	J	A
199	Loggerhead sea turtle		T	Low Use Area	General Distribution	J	F	M	A	M	J	J	A
243	Green sea turtle		T	-	General Distribution	J	F	M	A	M	J	J	A
	Kemp's ridley sea turtle		E	-	General Distribution	J	F	M	A	M	J	J	A
	Leatherback sea turtle		E	-	General Distribution	J	F	M	A	M	J	J	A
	Loggerhead sea turtle		T	-	General Distribution	J	F	M	A	M	J	J	A

Gulf of Mexico Offshore ESI: Biology Map 1 (cont.)

BIOLOGICAL RESOURCES:

INVERTEBRATE:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Spawning		Eggs	Larvae	Juveniles	Adults
7	Royal red shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jan-Dec	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
210	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Brown shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-May	Sep-Nov	-	Jan-Dec	-	Mar-Nov
212	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Brown shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-May	Sep-Nov	-	Jan-Dec	Mar-Nov	Mar-Nov
	Pink shrimp			-	General Distribution				M	A	M	J	J	A	S	O	N	-	-	-	-	Mar-Nov	-
	White shrimp			-	General Distribution						M	J	J	A	S	O	N	-	-	-	-	May-Nov	Jul-Nov
248	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Brown shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-May	Sep-Nov	-	Jan-Dec	Mar-Nov	Mar-Nov
	Pink shrimp			-	General Distribution				M	A	M	J	J	A	S	O	N	-	-	-	-	Mar-Nov	-
	White shrimp			-	General Distribution						M	J	J	A	S	O	N	-	-	-	-	May-Nov	-

MARINE MAMMAL:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Mating	Calving	Pupping	Molting
11	Atlantic spotted dolphin			Present	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Bottlenose dolphin			Present	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
13	Beaked whales			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
14	Blackfish			High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
15	Blackfish			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
162	Clymene dolphin			High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
163	Clymene dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
188	Kogia spp.			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
213	Atlantic spotted dolphin			High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
214	Atlantic spotted dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
215	Bottlenose dolphin			High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
216	Bottlenose dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
220	Pantropical spotted dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
221	Pilot whales			High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
222	Pilot whales			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
225	Rice's Whale		E	Present	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
227	Risso's dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
237	Sperm whale		E	High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
238	Sperm whale		E	Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
240	Spinner dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
245	Striped dolphin			Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-