

# Biology Map 13

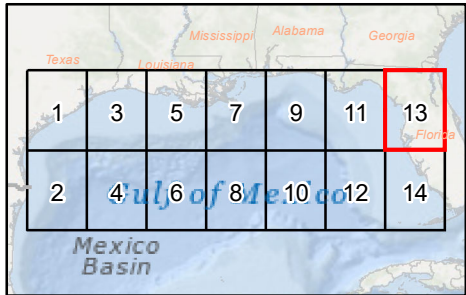
## Gulf of Mexico Offshore ESI



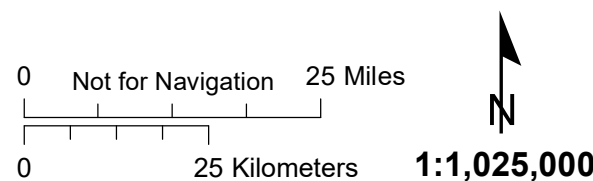
Bureau of Safety and Environmental Enforcement

- 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 13

BIOLOGICAL RESOURCES:

BENTHIC:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)											
20	Stony cup coral			Solitary	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D
85	Deep sea sponge			Structure-Forming	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D

BIRD:

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

FISH:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Spawning		Eggs	Larvae	Juveniles	Adults
184	Gulf sturgeon		T	-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
200	Giant manta		T	High Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	-
205	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Oct	Jan-Dec	Jan-Dec
	Blackfin snapper			-	General Distribution			M	A	M								-	-	-	Mar-May	-	
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	May-Oct	Jan-Dec	Jan-Dec
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Oct	Jan-Dec	Jan-Dec
	Bull shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Gag			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Sep-Nov	Jan-Dec
	Goliath grouper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jun-Oct	-	-	-	-	Jan-Dec
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-May	-	-	-	Jan-Dec	Jan-Dec
	Lemon shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Red drum			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Aug-Nov	-	Aug-Oct	-	-	Jan-Dec
	Red grouper			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-Jun	-	Jan-Dec	May-Jul	-	Jan-Dec
	Red snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-Oct	-	Jul-Nov	Jul-Nov	Jan-Dec	Jan-Dec
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Apr-Jul	Jan-Dec	Jan-Dec
	Scamp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-Jun	-	Mar-May	Mar-May	Jan-Dec	Jan-Dec
	Spinner shark			-	General Distribution						J	J	A	S	O	N		-	-	-	Jun-Nov	-	-
	Tiger shark			-	General Distribution						J	A					-	-	-	Jul-Aug	-	-	
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May-Sep	-	Jun-Nov	Jun-Nov	-	Jan-Dec
207	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Blackfin snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jan-Dec	-	-	-	Mar-May	Jan-Dec
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Gag			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Dec-May	-	Dec-Apr	Feb-May	-	Jan-Dec
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-May	-	-	-	Jan-Dec	Jan-Dec
	Lemon shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Red grouper			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-Jun	-	Jan-Dec	May-Jul	-	Jan-Dec
	Red snapper			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-Oct	-	Jul-Nov	Jul-Nov	Jan-Dec	Jan-Dec
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Apr-Jul	Jan-Dec	Jan-Dec
	Scamp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-Jun	-	Mar-May	Mar-May	Jan-Dec	Jan-Dec
	Tiger shark			-	General Distribution						J	A					-	-	-	-	Jul-Aug	-	-
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May-Sep	-	Jun-Nov	Jun-Nov	-	Jan-Dec
232	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Oct	Jan-Dec	Jan-Dec
	Blackfin snapper			-	General Distribution			M	A	M							-	-	-	-	Mar-May	-	-
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	May-Oct	Jan-Dec	Jan-Dec
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Oct	Jan-Dec	Jan-Dec
	Bull shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Cubera snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jun-Sep	-	-	-	Jan-Dec	Jan-Dec
	Gag			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Dec-May	-	Dec-Apr	Feb-May	-	Jan-Dec
	Goliath grouper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jun-Oct	-	-	-	-	Jan-Dec
	Great hammerhead			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-Jun	-	-	Jun-Oct	Jan-Dec	Jan-Dec
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-May	-	-	-	Jan-Dec	Jan-Dec
	King mackerel			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	May-Oct	May-Oct	Jan-Dec

Gulf of Mexico Offshore ESI: Biology Map 13 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH (cont.):																							
RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)						Spawning		Eggs	Larvae	Juveniles	Adults						
	Lemon shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	-	Jan-Dec
	Mutton snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Red grouper			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-Jun	-	Jan-Dec	May-Jul	-	Jan-Dec
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Scamp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-Jun	-	Mar-May	Mar-May	Jan-Dec	Jan-Dec
	Spanish mackerel			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-Sep	-	-	May-Oct	Mar-Nov	Jan-Dec
	Tiger shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May-Sep	-	Jun-Nov	Jun-Nov	-	Jan-Dec
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	-
234	Atlantic sharpnose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Blackfin snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jan-Dec	-	-	-	Mar-May	Jan-Dec
	Blacknose shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Blacktip shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Cobia			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-Sep	-	-	May-Jul	Apr-Oct	Jan-Dec
	Cubera snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jun-Sep	-	-	-	Jan-Dec	Jan-Dec
	Gag			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Dec-May	-	Dec-Apr	Feb-May	-	Jan-Dec
	Goliath grouper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jun-Oct	-	-	-	-	Jan-Dec
	Gray snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jun-Aug	-	-	Jun-Aug	-	Jan-Dec
	Greater amberjack			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-May	-	-	-	Jan-Dec	Jan-Dec
	Lemon shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Mutton snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May-Aug	-	-	-	Jan-Dec	Jan-Dec
	Red grouper			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-Jun	-	Jan-Dec	May-Jul	-	Jan-Dec
	Red snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-Oct	-	Jul-Nov	Jul-Nov	Jan-Dec	Jan-Dec
	Sandbar shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Scamp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Feb-Jun	-	Mar-May	Mar-May	Jan-Dec	Jan-Dec
	Silk snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	-
	Tiger shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jul-Aug	Jan-Dec	Jan-Dec
	Vermilion snapper			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May-Sep	-	Jun-Nov	Jun-Nov	-	Jan-Dec
	Whale shark			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	-
241	Smalltooth sawfish	E		High Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
242	Smalltooth sawfish	E		-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec

HERPETOFAUNA:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Nesting	Hatching	Internest	Juveniles	Adults
161	Loggerhead sea turtle		T	High	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	-
182	Green sea turtle		T	High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
183	Green sea turtle		T	Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
185	Kemp's ridley sea turtle		E	High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
186	Kemp's ridley sea turtle		E	Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
195	Leatherback sea turtle		E	High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
196	Leatherback sea turtle		E	Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
198	Loggerhead sea turtle		T	High Use Area	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
199	Loggerhead sea turtle		T	Low Use Area	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec
243	Green sea turtle		T	-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	-
	Kemp's ridley sea turtle		E	-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	-
	Leatherback sea turtle		E	-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	-
	Loggerhead sea turtle		T	-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	-

INVERTEBRATE:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Spawning		Eggs	Larvae	Juveniles	Adults
206	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Pink shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	-
208	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Pink shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jan-Dec	-	-	-	Jan-Dec	Jan-Dec
233	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Caribbean spiny lobster			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Pink shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	-
235	Blue crab			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Mar-Nov	Mar-Nov	Mar-Nov
	Caribbean spiny lobster			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Pink shrimp			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Jan-Dec	-	-	-	Jan-Dec	Jan-Dec

MARINE MAMMAL:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Mating	Calving	Pupping	Molting
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	-	-	-	-