

Appendix S1

Table S1 Scientific and common names of all 243 species found in the filtered Gulf of Mexico Video Survey (GOMVS) dataset, and composition of reduced species lists. SERFS = Southeast Fishery Independent Survey, FSSI = Fish Stock Sustainability Index. Rank indicates how common each species was in the total dataset with a rank of 1 assigned to the most common species. A checkmark (✓) indicates that a species was included in a particular reduced species list.

Species	Common name	SERFS	GOMVS	FSSI	Rank
<i>Abudefduf saxatilis</i>	sargeant major				171
<i>Acanthemblemaria spinosa</i>	spinyhead blenny				237
<i>Acanthurus bahianus</i>	ocean surgeon		✓		74
<i>Acanthurus chirurgus</i>	doctorfish		✓		102
<i>Acanthurus coeruleus</i>	blue tang surgeonfish		✓		32
<i>Acanthurus randalli</i>	Gulf surgeonfish				180
<i>Albula vulpes</i>	bonefish				236
<i>Alectis ciliaris</i>	African pompano		✓		209
<i>Aluterus monoceros</i>	unicorn leatherjacket				226
<i>Aluterus schoepfi</i>	orange filefish				135
<i>Aluterus scriptus</i>	scribbled leatherjacket				144
<i>Amblycirrhitus pinos</i>	redspotted hawkfish				159
<i>Anisotremus virginicus</i>	porkfish		✓		151
<i>Antennarius ocellatus</i>	ocellated frogfish				189
<i>Anthias nicholsi</i>	yellowfin bass				239
<i>Anthias tenuis</i>	threadnose bass				240
<i>Apogon maculatus</i>	flamefish				225
<i>Apogon pseudomaculatus</i>	twospot cardinalfish				191
<i>Aulostomus maculatus</i>	trumpetfish				146
<i>Balistes capriscus</i>	gray triggerfish	✓	✓	✓	10
<i>Balistes vetula</i>	queen triggerfish		✓		54
<i>Bodianus pulchellus</i>	spotfin hogfish				17
<i>Bodianus rufus</i>	Spanish hogfish				87
<i>Calamus bajonado</i>	jolthead porgy		✓		72
<i>Calamus calamus</i>	saucereye porgy		✓		36
<i>Calamus leucosteus</i>	whitebone porgy		✓		25
<i>Calamus nodosus</i>	knobbed porgy		✓		8
<i>Calamus penna</i>	speckled porgy				208
<i>Calamus proridens</i>	littlehead porgy		✓		58
<i>Cantherhines macrocerus</i>	American whitespotted filefish				121
<i>Cantherhines pullus</i>	orangespotted filefish				227
<i>Canthidermis sufflamen</i>	ocean triggerfish		✓		88
<i>Canthigaster jamestyeri</i>	goldfaced toby				73
<i>Canthigaster rostrata</i>	Caribbean sharpnose puffer				35
<i>Caranx bartholomaei</i>	yellow jack		✓		82
<i>Caranx crysos</i>	blue runner		✓		41

Table S1 (continued)

Species	Common name	SERFS	GOMVS	FSSI	Rank
<i>Caranx hippos</i>	crevalle jack		✓		131
<i>Caranx latus</i>	horseeye jack		✓		215
<i>Caranx lugubris</i>	black jack		✓		120
<i>Caranx ruber</i>	bar jack		✓		63
<i>Carcharhinus brevipinna</i>	spinner shark	✓		✓	167
<i>Carcharhinus plumbeus</i>	sandbar shark	✓		✓	183
<i>Caulolatilus chrysops</i>	goldface tilefish	✓	✓		43
<i>Caulolatilus cyanops</i>	blackline tilefish	✓	✓		109
<i>Caulolatilus intermedius</i>	Gulf bareye tilefish		✓		196
<i>Caulolatilus microps</i>	gray tilefish	✓	✓		117
<i>Centropristis fuscus</i>	twospot seabass				129
<i>Centropristis ocyura</i>	bank seabass		✓		28
<i>Centropyge argi</i>	cherubfish				45
<i>Cephalopholis cruentata</i>	graysby grouper	✓	✓		47
<i>Cephalopholis fulva</i>	coney	✓	✓		133
<i>Chaetodipterus faber</i>	Atlantic spadefish		✓		199
<i>Chaetodon aculeatus</i>	longsnout butterflyfish				67
<i>Chaetodon aya</i>	bank butterflyfish				22
<i>Chaetodon capistratus</i>	four-eye butterflyfish				107
<i>Chaetodon ocellatus</i>	spotfin butterflyfish				27
<i>Chaetodon sedentarius</i>	reef butterflyfish				13
<i>Chaetodon striatus</i>	banded butterflyfish				234
<i>Chilomycterus antillarum</i>	web burrfish				192
<i>Chromis cyanea</i>	blue chromis				91
<i>Chromis enchrysurus</i>	yellowtail reeffish				20
<i>Chromis insolatus</i>	sunshinefish				81
<i>Chromis multilineata</i>	brown chromis				114
<i>Chromis scotti</i>	purple reeffish				79
<i>Clepticus parrae</i>	creole wrasse				108
<i>Corniger spinosus</i>	spinycheek soldierfish				164
<i>Cryptotomus roseus</i>	bluelip parrotfish				130
<i>Cyclopsetta fimbriata</i>	spotfin flounder				190
<i>Dasyatis americana</i>	southern stingray				137
<i>Dasyatis centroura</i>	rougetail stingray				197
<i>Decapterus punctatus</i>	round scad				140
<i>Decodon puellaris</i>	red hogfish				44
<i>Dermatolepis inermis</i>	marbled grouper	✓	✓		76
<i>Diplectrum bivittatum</i>	dwarf sand perch				168
<i>Diplectrum formosum</i>	sand perch		✓		37
<i>Echeneis naucrates</i>	live sharksucker				150
<i>Elagatis bipinnulatus</i>	rainbow runner		✓		204
<i>Epinephelus adscensionis</i>	rock hind	✓	✓		65
<i>Epinephelus drummondhayi</i>	speckled hind	✓	✓	✓	62
<i>Epinephelus flavolimbatus</i>	yellowedge grouper	✓	✓	✓	104

Table S1 (continued)

Species	Common name	SERFS	GOMVS	FSSI	Rank
<i>Epinephelus guttatus</i>	red hind	✓	✓		96
<i>Epinephelus itajara</i>	goliath grouper	✓	✓	✓	221
<i>Epinephelus morio</i>	red grouper	✓	✓	✓	6
<i>Epinephelus nigritus</i>	Warsaw grouper	✓	✓	✓	92
<i>Epinephelus niveatus</i>	snowy grouper	✓	✓	✓	134
<i>Epinephelus striatus</i>	Nassau grouper	✓	✓	✓	187
<i>Equetus iwamotoi</i>	blackbar drum				105
<i>Equetus lanceolatus</i>	jackknifefish				103
<i>Equetus umbrosus</i>	cubbyu				119
<i>Etelis oculatus</i>	queen snapper	✓	✓		157
<i>Euthynnus alletteratus</i>	little tunny	✓	✓	✓	59
<i>Fistularia tabacaria</i>	cornetfish				176
<i>Ginglymostoma cirratum</i>	nurse shark	✓		✓	139
<i>Gobiosoma oceanops</i>	neon goby				222
<i>Gonioplectrus hispanus</i>	Spanish flag				89
<i>Gymnothorax hubbsi</i>	lichen moray				211
<i>Gymnothorax kolpos</i>	blacktail moray				170
<i>Gymnothorax moringa</i>	spotted moray				98
<i>Gymnothorax saxicola</i>	ocellated moray				77
<i>Haemulon album</i>	white margate		✓		118
<i>Haemulon aurolineatum</i>	tomtate		✓		66
<i>Haemulon carbonarium</i>	Caesar grunt		✓		186
<i>Haemulon flavolineatum</i>	French grunt		✓		132
<i>Haemulon macrostomum</i>	Spanish grunt		✓		218
<i>Haemulon melanurum</i>	cottonwick		✓		153
<i>Haemulon plumieri</i>	white grunt	✓	✓	✓	46
<i>Haemulon sciurus</i>	bluestriped grunt		✓		219
<i>Haemulon striatum</i>	striped grunt				143
<i>Halichoeres bathyphilus</i>	greenband wrasse				14
<i>Halichoeres bivittatus</i>	slippery dick				23
<i>Halichoeres caudalis</i>	painted wrasse				136
<i>Halichoeres cyanocephalus</i>	yellowcheek wrasse				162
<i>Halichoeres garnoti</i>	yellowhead wrasse				53
<i>Halichoeres maculipinna</i>	clown wrasse				127
<i>Halichoeres pictus</i>	rainbow wrasse				179
<i>Halichoeres radiatus</i>	puddingwife		✓		123
<i>Hemanthias leptus</i>	longtail bass				194
<i>Hemanthias vivanus</i>	red barbier				126
<i>Hemipteronotus novacula</i>	pearly razorfish				86
<i>Heteroconger halis</i>	brown garden eel				229
<i>Hildebrandia flava</i>	yellow conger				177
<i>Holacanthus bermudensis</i>	blue angelfish				7
<i>Holacanthus ciliaris</i>	queen angelfish				95
<i>Holacanthus tricolor</i>	rock beauty				68

Table S1 (continued)

Species	Common name	SERFS	GOMVS	FSSI	Rank
<i>Holanthias martinicensis</i>	rougtongue bass				18
<i>Holocentrus adscensionis</i>	squirrelfish		✓		61
<i>Holocentrus marianus</i>	longjaw squirrelfish				84
<i>Holocentrus rufus</i>	longspine squirrelfish		✓		147
<i>Hypoplectrus gemma</i>	blue hamlet				152
<i>Hypoplectrus guttavarius</i>	shy hamlet				217
<i>Hypoplectrus nigricans</i>	black hamlet				185
<i>Hypoplectrus puella</i>	barred hamlet				39
<i>Hypoplectrus unicolor</i>	butter hamlet				83
<i>Inermia vittata</i>	boga				193
<i>Ioglossus calliurus</i>	blue goby				80
<i>Lachnolaimus maximus</i>	hogfish	✓	✓	✓	38
<i>Lactophrys bicaudalis</i>	spotted trunkfish		✓		163
<i>Lactophrys quadricornis</i>	scrawled cowfish		✓		106
<i>Lactophrys trigonus</i>	buffalo trunkfish		✓		124
<i>Lactophrys triqueter</i>	smooth trunkfish		✓		116
<i>Lagocephalus laevigatus</i>	smooth puffer				206
<i>Lagodon rhomboides</i>	pinfish				169
<i>Liopropoma eukrines</i>	wrasse bass				26
<i>Lutjanus analis</i>	mutton snapper	✓	✓	✓	48
<i>Lutjanus apodus</i>	schoolmaster	✓	✓	✓	149
<i>Lutjanus buccanella</i>	blackfin snapper	✓	✓	✓	166
<i>Lutjanus campechanus</i>	red snapper	✓	✓	✓	4
<i>Lutjanus griseus</i>	gray snapper	✓	✓	✓	16
<i>Lutjanus jocu</i>	dog snapper	✓	✓	✓	165
<i>Lutjanus synagris</i>	lane snapper	✓	✓	✓	60
<i>Lutjanus vivanus</i>	silk snapper	✓	✓	✓	138
<i>Malacanthus plumieri</i>	sand tilefish	✓	✓		15
<i>Melichthys niger</i>	black triggerfish		✓		128
<i>Microspathodon chrysurus</i>	yellowtail damselfish				175
<i>Mobula hypostoma</i>	lesser devil ray				205
<i>Monacanthus ciliatus</i>	fringed filefish				228
<i>Monacanthus hispidus</i>	planehead filefish				101
<i>Monacanthus tuckeri</i>	slender filefish				173
<i>Mulloidichthys martinicus</i>	yellow goatfish		✓		223
<i>Mullus auratus</i>	red goatfish		✓		154
<i>Muraena retifera</i>	reticulate moray				64
<i>Mustelus canis</i>	smooth dogfish	✓			174
<i>Mycteroperca bonaci</i>	black grouper	✓	✓	✓	97
<i>Mycteroperca interstitialis</i>	yellowmouth grouper	✓	✓		33
<i>Mycteroperca microlepis</i>	gag	✓	✓	✓	12
<i>Mycteroperca phenax</i>	scamp	✓	✓	✓	2
<i>Mycteroperca tigris</i>	tiger grouper	✓	✓	✓	220
<i>Mycteroperca venenosa</i>	yellowfin grouper	✓	✓	✓	99

Table S1 (continued)

Species	Common name	SERFS	GOMVS	FSSI	Rank
<i>Myripristis jacobus</i>	blackbar soldierfish				200
<i>Ocyurus chrysurus</i>	yellowtail snapper	✓	✓	✓	30
<i>Ogcocephalus corniger</i>	longnose batfish				238
<i>Ophichthus puncticeps</i>	palespotted eel				122
<i>Opistognathus aurifrons</i>	yellowhead jawfish				71
<i>Opsanus pardus</i>	leopard toadfish				195
<i>Ostichthys trachypomus</i>	bigeye soldierfish				181
<i>Pagrus pagrus</i>	red porgy	✓	✓	✓	1
<i>Parablennius marmoratus</i>	seaweed blenny				156
<i>Paraconger caudilimbatus</i>	margintail conger				145
<i>Paradiplagrammus bairdi</i>	lancer dragonet				230
<i>Paranthias furcifer</i>	creolefish		✓		19
<i>Pomacanthus arcuatus</i>	gray angelfish				69
<i>Pomacanthus paru</i>	French angelfish				78
<i>Pomacentrus leucostictus</i>	beaugregory				160
<i>Pomacentrus partitus</i>	bicolor damselfish				57
<i>Pomacentrus planifrons</i>	threespot damselfish				232
<i>Pomacentrus variabilis</i>	cocoa damselfish				55
<i>Priacanthus arenatus</i>	Atlantic bigeye		✓		93
<i>Priacanthus cruentatus</i>	glasseye		✓		188
<i>Prionotus rubio</i>	blackwing searobin				198
<i>Pristigenys alta</i>	short bigeye		✓		24
<i>Pristipomoides aquilonaris</i>	wenchman	✓	✓	✓	34
<i>Pseudupeneus maculatus</i>	spotted goatfish		✓		21
<i>Rachycentron canadum</i>	cobia	✓	✓	✓	233
<i>Rhomboplites aurorubens</i>	vermilion snapper	✓	✓	✓	9
<i>Rypticus maculatus</i>	whitespotted soapfish				148
<i>Scarus coelestinus</i>	midnight parrotfish		✓		210
<i>Scarus coeruleus</i>	blue parrotfish		✓		142
<i>Scarus croicensis</i>	striped parrotfish				29
<i>Scarus taeniopterus</i>	princess parrotfish		✓		141
<i>Scarus vetula</i>	queen parrotfish		✓		112
<i>Scomberomorus cavalla</i>	king mackerel	✓	✓	✓	113
<i>Scomberomorus maculatus</i>	Spanish mackerel	✓	✓	✓	212
<i>Scomberomorus regalis</i>	cero	✓	✓		155
<i>Scorpaena plumieri</i>	spotted scorpionfish				201
<i>Selar crumenophthalmus</i>	bigeye scad				203
<i>Selene vomer</i>	lookdown				213
<i>Seriola dumerili</i>	greater amberjack	✓	✓	✓	5
<i>Seriola fasciata</i>	lesser amberjack	✓	✓		31
<i>Seriola rivoliana</i>	almaco jack	✓	✓		3
<i>Seriola zonata</i>	banded rudderfish	✓	✓		94
<i>Serranus annularis</i>	orangeback bass				40
<i>Serranus atrobranchus</i>	blackear bass				178

Table S1 (continued)

Species	Common name	SERFS	GOMVS	FSSI	Rank
<i>Serranus baldwini</i>	lantern bass				161
<i>Serranus chionaraia</i>	snow bass				241
<i>Serranus notospilus</i>	saddle bass				50
<i>Serranus phoebe</i>	tattler				11
<i>Serranus subligarius</i>	belted sandfish				125
<i>Serranus tabacarius</i>	tobaccofish				90
<i>Serranus tigrinus</i>	harlequin bass				115
<i>Serranus tortugarum</i>	chalk bass				242
<i>Sparisoma atromarium</i>	greenblotch parrotfish				42
<i>Sparisoma aurofrenatum</i>	redband parrotfish				51
<i>Sparisoma chrysopterygum</i>	redtail parrotfish		✓		111
<i>Sparisoma rubripinne</i>	redfin parrotfish		✓		158
<i>Sparisoma viride</i>	stoplight parrotfish		✓		56
<i>Sphoeroides dorsalis</i>	marbled puffer				207
<i>Sphoeroides nephelus</i>	southern puffer				110
<i>Sphoeroides spengleri</i>	bandtail puffer				75
<i>Sphyraena barracuda</i>	great barracuda		✓		52
<i>Sphyraena guachancho</i>	Guachanche barracuda				243
<i>Sphyrna lewini</i>	scalloped hammerhead	✓		✓	172
<i>Sphyrna tiburo</i>	bonnethead	✓		✓	235
<i>Stenotomus caprinus</i>	longspine porgy				70
<i>Syacium papillosum</i>	dusky flounder				224
<i>Synodus intermedius</i>	sand diver				231
<i>Synodus poeyi</i>	offshore lizardfish				214
<i>Thalassoma bifasciatum</i>	bluehead wrasse				49
<i>Trachinocephalus myops</i>	snakefish				182
<i>Trachinotus falcatus</i>	permit		✓		184
<i>Trachurus lathami</i>	rough scad				202
<i>Upeneus parvus</i>	dwarf goatfish		✓		100
<i>Uraspis secunda</i>	cottonmouth jack				216
<i>Xanthichthys ringens</i>	sargassum triggerfish		✓		85