

## SAIA List of Ecologically Unsustainable Species

## Note

The aquarium fishery in Southeast Asia contributes to the destruction of coral reefs. Although illegal, the use of cyanide to stun fish is still widespread, especially for species that seek shelter between coral branches, in holes, and among rocks (like damsels or gobies), but also those occurring at greater depths (e.g., dwarf angels, some anthias) or the ones fetching high prices (like angelfish or surgeonfish). While ideally the dosage is only intended to stun the targeted fish, it is often sufficient to kill the non-targeted invertebrates building the reef. As such, is a destructive fishing method, banned by regulation in Indonesia and the Philippines. Fish caught with cyanide are a product of illegal fishing. According to EU Regulation, the import of products from illegal, unreported, and unregulated (IUU) fishing is prohibited.\* Similarly, the Lacey Act, a conservation law in the United States, prohibits trade in wildlife, fish, and plants that have been illegally taken, possessed, transported, or sold. However, enforcing these laws is difficult because there is insufficient control in both the countries of origin and in the markets. Therefore, the likelihood of purchasing a product from illegal fishing is real.

Ask your dealer about the origin of the offered animals and insist on sustainable fishing methods!

Inadequate or deficient fishery management is another, often underestimated, problem of aquarium fisheries in South East Asia. Many fish come from unreported and unregulated fisheries. For most coral fish species, but also invertebrates, no data exist. The status of local populations and catch volumes are thus unknown. This makes sustainable fishery management impossible and potentially endangers the existence of many species. Since coral reefs and their populations are threatened by direct and indirect anthropogenic influences, any usage of the resource including collection should be regulated. Currently, however, that is only the case for the aquarium fisheries in West Hawai'i and in Australia. It is up to hobby aquarists and the aquarium industry to demand adequate management of aquarium fishing in the main supply countries, like Indonesia and the Philippines.

## Criteria of Sustainability/Unsustainability:

1) Rarity: If it is difficult to find a species in the wild, it may be an indicator of the species being rare. The assumption is applied when stock status is data deficient. The industry does not want to stand accused of collecting a species to extinction!

## Stock Status: the family, genus, or species is

2) listed as threatened or 3) not assessed or evaluated as data deficient in the IUCN Red list\*\* (in cases where a family or genus is listed, the worst case scenario applies) or 4) threatened in its population by other activities (e.g., bycatch or targeted for food, recreational or aquarium fishery, habitat loss).

5) Breeding: These species are readily available from culture/breeding at retail level (Source: CORAL Magazine's Captive Bred Marine Fish Species List for 2015), therefore should not be taken or offered from the wild.

\* Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter, and eliminate illegal, unreported, and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001, and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999

\*\* IUCN Red List categories: DD data deficient; LC least concern; NT near threatened; VU vulnerable; EN endangered; CR critically endangered.

				LEGEND	Highly unsustainable	3
					Relatively unsustainable	:
					Partly sustainable	
					Sustainable when from breeding/culture	$\odot$
	SAIA List of Ecolo	gically Unsus	stainable Species			
Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	Applied Criteria 3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Abudefduf hoefleri (African Sergeant)	IUCN Red List Status: data deficient (DD)			<b></b>		
Acanthostracion notacanthus (Island Boxfish)	IUCN Red List Status: data deficient (DD); rare; low population density	•		<b>(</b>		
Acanthurus polyzona (Multibar Surgeonfish)	IUCN Red List Status: data deficient (DD); rare; low population density	<b>:</b>		<b></b>		
Acreichthys tomentosus (Bristletail Filefish)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Amblycirrhitus earnshawi (White Hawkfish)	IUCN Red List Status: endangered (EN); rare; impacted by habitat modification and degradation	<mark>()</mark>	8		8	
Anampses lineatus (Lined Wrasse)	IUCN Red List Status: data deficient (DD); rare	<b>:</b>		<b></b>		
Anemonefish (Subfamily Amphiprioninae)	IUCN Red List Status: most species not assessed; potentially locally over-collected because extremely easy to catch & high demand; wild specimens are prone to carry parasite <i>Brooklynella hostilis</i> ; should only be purchased from captive breeding					©
Aeoliscus punctulatus (Speckled Shrimpfish)	IUCN Red List Status: data deficient (DD); impacted by habitat modification and degradation			<b>:</b>	<b></b>	
Aeoliscus strigatus (Coral Shrimpfish)	IUCN Red List Status: data deficient (DD); impacted by habitat modification and degradation			<b>:</b>	÷	
Apogon semilineatus (Half-lined Cardinalfish)	IUCN Red List Status: data deficient (DD); rare	<b>(</b>		÷		
Apogonichthyoides melas (Black Cardinalfish)	IUCN Red List Status: not assessed; available from captive breeding			e		$\odot$
Bamboo Sharks (Hemiscylliidae)	IUCN Red List Status: data deficient (DD), near threatened (NT) or vulnerable (VU); slow growth; mature late; some species available from captive breeding		8		3	<b>©</b>

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Balistes capriscus (Gray Triggerfish)	IUCN Red List Status: vulnerable (VU); over exploited by both commercial and recreational fisheries		8		<b>:</b>	
Balistes vetula (Queen Triggerfish)	IUCN Red List Status: vulnerable (VU); over exploited by both commercial and recreational fisheries		8		<b>:</b>	
Bodianus paraleucosticticus (Five-striped Hogfish)	IUCN Red List Status: data deficient (DD); rare	<b></b>		÷		
Carpet sharks/ Wobbegongs (Orectolobidae)	IUCN Red List Status: Data Deficient (DD); slow growth; mature late			<b>(</b>	÷	
Chaetodon andamanensis (Yellow Butterflyfish)	IUCN Red List Status: data deficient (DD); relies on live coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events			9	÷	
Chaetodon bennetti (Bluelashed Butterflyfish)	IUCN Red List Status: data deficient (DD); relies on live coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events			<b></b>		
Chaetodon ocellicaudus (Spot-tail Butterflyfish)	IUCN Red List Status: data deficient (DD); relies on live coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events			<b>(</b>	٢	
Chaetodon rainfordi (Rainford's Butterflyfish)	IUCN Red List Status: near threatened (NT); relies on live Acropora coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events; declining population		<b>:</b>			
Chaetodon reticulatus (Reticulated Butterflyfish)	IUCN Red List Status: data deficient (DD); relies on live coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events			9	÷	
Chaetodon trifascialis (Triangulate Butterflyfish)	IUCN Red List Status: near threatened (NT); relies on live Acropora coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events; declining population		<b></b>			
Chaetodontoplus caeruleopunctatus (Bluespotted Angelfish)	IUCN Red List Status: data deficient (DD); rare; restricted range, endemic to the Philippines; low population density	<b>:</b>		9		
Chaetodontoplus cephalareticulatus (Maze Angelfish)	IUCN Red List Status: not assessed; restricted range; available from captive breeding					C
Chaetodontoplus duboulayi (Scribbled Angelfish)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Chaetodontoplus septentrionalis (Bluestriped Angelfish)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Chaetodontoplus vanderloosi (Vanderloos Angelfish)	IUCN Red List Status: endangered (EN); rare; restricted range, endemic to Papua New Guinea; low population density	<b>i</b>	8			
Cheilinus undulatus (Humphead Wrasse)	IUCN Red List Status: endangered (EN); over exploited by the live reef fish trade in SE Asia and threatened by IUU fisheries; low population density		8		8	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Chlorurus bowersi (Bower's Parrotfish)	IUCN Red List Status: near threatened (NT); restricted range; potentially overfished		<b>:</b>		<b>:</b>	
Choerodon azurio (Scarbreast Tuskfin)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished			<b></b>	÷	
Choerodon schoenleinii (Blackspot Tuskfish)	IUCN Red List Status: near threatened (NT); restricted range; potentially overfished		<b>:</b>		<b>:</b>	
Chromis flavicauda (Cobalt Chromis)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Centropyge nahackyi (Nahacky's Angelfish)	IUCN Red List Status: near threatened (NT); restricted range		<u>.</u>			
Cirrhilabrus balteatus (Girdled Wrasse)	IUCN Red List Status: data deficient (DD); restricted range, endemic to the Marshall Islands; potentially overfished by the marine aquarium trade	÷		<b>(</b>	÷	
<i>Cirrhilabrus brunneus</i> (Dusky Fairy Wrasse)	IUCN Red List Status: data deficient (DD); restricted range, endemic to Indonesia; potentially overfished by the marine aquarium trade	÷		<b></b>	<b>:</b>	
Cirrhilabrus cyanopleura (Yellow-flanked Wrasse)	IUCN Red List Status: data deficient (DD); potentially overfished by the marine aquarium trade and impacted by habitat modification and degradation			9	÷	
<i>Cirrhilabrus exquisitus</i> (Exquisite Wrasse)	IUCN Red List Status: data deficient (DD); impacted by habitat modification and degradation			<b>:</b>	÷	
Cirrhilabrus filamentosus (Whip-fin Wrasse)	IUCN Red List Status: data deficient (DD); restricted range, endemic to Indonesia; potentially overfished by the marine aquarium trade	÷		<b></b>	÷	
Cirrhilabrus joanallenae (Pulauweh Wrasse)	IUCN Red List Status: data deficient (DD); restricted range, probably endemic to Indonesia; potentially overfished by the marine aquarium trade	÷			÷	
<i>Cirrhilabrus rhomboidalis</i> (Diamond-tail Fairy Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by the marine aquarium trade			•	÷	
Cirrhilabrus rubrisquamis (Rosy-scales Fairy Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by the marine aquarium trade			•	<b>(</b>	
Cirrhilabrus solorensis (Red-eye Wrasse)	IUCN Red List Status: data deficient (DD); restricted range, endemic to Indonesia; potentially overfished by the marine aquarium trade	÷		<b></b>	÷	
Cirrhilabrus temminckii (Threadfin Wrasse)	IUCN Red List Status: data deficient (DD); potentially overfished by the marine aquarium trade and impacted by habitat modification and degradation			<b>(</b>	÷	
Cirrhilabrus tonozukai (Tono's Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by the marine aquarium trade			<b>=</b>	÷	
Coryphopterus eidolon (Pallid Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<u>:</u>	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Coryphopterus hyalinus (Glass Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<u>:</u>	
Coryphopterus kuna (Kuna Goby)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation, and predation by the invasive lionfish			<b>(</b>	<u>:</u>	
Coryphopterus lipernes (Peppermint Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<b>:</b>	
Coryphopterus personatus (Masked Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<b></b>	
Coryphopterus thrix (Bartail Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<b></b>	
Coryphopterus tortugae (Patch-reef Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<b>:</b>	
Coryphopterus venezuelae (Sand-canyon Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<u>:</u>	
Cromileptes altivelis (Humpback Grouper)	IUCN Red List Status: vulnerable (VU); low resilience; slow growth; favored target species of the live reef fish trade; available from captive breeding		8		<u>:</u>	٢
Cryptocentrus cinctus (Yellow Prawn-Goby)	IUCN Red List Status: not assessed; available from captive breeding			<b>(</b>		$\odot$
Didogobius amicuscaridis (Prawn-Goby)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by habitat modification and degradation		8		<b>(</b>	
Doryrhamphus dactyliophorus (Banded Pipefish)	IUCN Red List Status: data deficient (DD); declining population			<b></b>		
<b>Dottybacks</b> (Pseudochromidae)	IUCN Red List Status: data deficient (DD); many species available from captive breeding			<b></b>		$\odot$
<i>Ecsenius kurti</i> (Kurt's Coralblenny)	IUCN Red List Status: vulnerable (VU); restricted range		8			
<i>Ecsenius randalli</i> (Coralblenny)	IUCN Red List Status: vulnerable (VU); restricted range		8			
<i>Ecsenius tigris</i> (Tiger Blenny)	IUCN Red List Status: vulnerable (VU); restricted range		8			
Ecsenius tricolor (Tricolor Coralblenny)	IUCN Red List Status: vulnerable (VU); restricted range		8			
<i>Elacatinus cayman</i> (Cayman Cleaner Goby)	IUCN Red List Status: endangered (EN); rare; impacted by habitat modification and degradation	3	8		<b>:</b>	

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<i>Elacatinus centralis</i> (Cayman Sponge Goby)	IUCN Red List Status: endangered (EN); rare; impacted by habitat modification and degradation	8	8		<u>:</u>	
<i>Elacatinus lobeli</i> (Caribbean Neon Goby)	IUCN Red List Status: near threatened (NT); restricted range; impacted by habitat modification and degradation		<b>:</b>		<u>:</u>	
Elacatinus evelynae (Sharknose Goby)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
<i>Elacatinus figaro</i> (Barber Goby)	IUCN Red List Status: not assessed; available from captive breeding			<b>(</b>		$\odot$
Elacatinus macrodon (Tiger Goby)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Elacatinus oceanops (Northern Neon Goby)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
<i>Elacatinus prochilos</i> (Broadstripe Goby)	IUCN Red List Status: vulnerable (VU); impacted by habitat modification and degradation		8		<b>(</b>	
Elacatinus puncticulatus (Redhead Goby)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
<i>Emblemaria walkeri</i> (Elusive Signal Blenny)	IUCN Red List Status: data deficient (DD); very rare; restricted range, endemic to the Gulf of California	8		<b></b>		
<i>Fusigobius pallidus</i> (Pale Sandgoby)	IUCN Red List Status: not assessed; available from captive breeding			<b></b>		$\odot$
Ghost Pipefishes (Solenostomidae)	IUCN Red List Status: data deficient (DD); rare; low population density	<b>:</b>		<b></b>		
Gobiesox punctulatus (Stippled Clingfish)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Gobiopsis quinquecincta (Fiveband Barbelgoby)	IUCN Red List Status: not assessed; available from captive breeding			<b>(</b>		$\odot$
<b>Grouper</b> (Epinephelinae)	IUCN Red List Status: Vulnerable (VU); low resilience and high vulnerability; targeted by life reef fish trade; often caught by using cyanide when origin in Indonesia or Philippines		8		8	
Guitarfish (Rhinobatidae)	IUCN Red List Status: endangered (EN); low resilience; mature late; overfished by targeted fishery and as bycatch of commercial fisheries		8		<b>:</b>	
Gymnothorax bacalladoi (Canary moray)	IUCN Red List Status: data deficient (DD); restricted range			<b>(</b>		
Halichoeres brasiliensis (Brazilian Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished			<b>(</b>	÷	
Halichoeres discolor (Cocos Wrasse)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Halichoeres insularis (Socorro Wrasse)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Halichoeres malpelo (Malpelo Wrasse)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Halichoeres pelicieri (Peliciers Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>(</b>	÷	
Halichoeres rubricephalus (Red-head Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by the marine aquarium trade			<b>=</b>	÷	
Halichoeres salmofasciatus (Red-striped Wrasse)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		:	
Helcogramma maldivensis (Triplefin Blenny)	IUCN Red List Status: data deficient (DD); very restricted range, endemic to South Male Atoll, Maldives; impacted by habitat modification and degradation	<b>:</b>		<b>(</b>	÷	
Holacanthus clarionensis (Clarion Angelfish)	IUCN Red List Status: vulnerable (VU); very restricted range; potentially overfished; aquarium fishery is regulated now; available from captive breeding		8		<b></b>	©
Holacanthus limbaughi (Clipperton Angelfish)	IUCN Red List Status: near threatened (NT); very restricted range, endemic to reef habitat in the Clipperton Atoll; thus potenital for overfishing	<b>(</b>	e			
Hypsoblennius proteus (Socorro Blenny)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b></b>	
Labrisomus socorroensis (Misspelled Blenny)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Larabicus quadrilineatus (Fourline Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by the marine aquarium trade			<b>(</b>	<b>(</b> )	
<i>Lythrypnus insularis</i> (Distant Goby)	IUCN Red List Status: vulnerable (VU); very restricted range, endemic to the Revillagigedo Islands in the eastern central Pacific; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Lythrypnus gilberti (Galapagos Blue-banded Goby)	IUCN Red List Status: vulnerable (VU); very restricted range, endemic to the Galápagos archipelago; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		٢	
Lythrypnus rhizophora (Spotcheek goby)	IUCN Red List Status: data deficient (DD); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)			<b>(</b>	<b>:</b>	
Malacoctenus africanus (Senegal Blenny)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>(</b>	÷	

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Malacoctenus zonogaster Belted Blenny)	IUCN Red List Status: vulnerable (VU); very restricted range, endemic to the Galapagos Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
<b>Meiacanthus abruptus</b> Komodo Fangblenny)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by habitat modification and degradation		8		<b></b>	
Meiacanthus bundoon Bundoon Blenny)	IUCN Red List Status: least concern (LC); restricted range; aquarium fishery is regulated; available from captive breeding					0
Meiacanthus grammistes Striped Poison-Fangblenny)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
<b>Meicanthus kamohari</b> Kamohara Fangblenny)	IUCN Red List Status: not assessed; available from captive breeding			<b>(</b>		$\odot$
<i>Meicanthus mossambicus</i> Mozambique Fangblenny)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Meicanthus nigrolineatus Blackline Fangblenny)	IUCN Red List Status: least concern (LC); available from captive breeding					<b></b>
Meiacanthus oualanensis Canary Fangblenny)	IUCN Red List Status: least concern (LC); restricted range; aquarium fishery is regulated; available from captive breeding					$\odot$
<i>Meiacanthus smithi</i> Disco Blenny)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
<i>Meiacanthus tongaensis</i> Tonga Fangblenny)	IUCN Red List Status: least concern (LC); restricted range; available from captive breeding					$\odot$
<b>Myripristis gildi</b> Clipperton Cardinal Soldierfish)	IUCN Red List Status: vulnerable (VU); very restricted range, endemic to the Clipperton Atoll; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b></b>	
<i>Myripristis clarionensis</i> Yellow Soldierfish)	IUCN Red List Status: vulnerable (VU); very restricted range, endemic to the Revillagigedo Islands and Clipperton Atoll; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		٢	
<b>Naso tuberosus</b> Humpnose Unicornfish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			: :	÷	
Nurse Sharks (Ginglymostomatidae)	IUCN Red List Status: data deficient (DD), near threatened (NT) or vulnerable (VU), often bycatch to demersal fisheries; slow growth, mature late		8		8	
Oxymonacanthus longirostris Harlequin Filefish)	IUCN Red List Status: vulnerable (VU); relies on live coral for food and/or recruitment, thus impacted by reef degradation and coral bleaching events; declining population		8		<b></b>	
<b>Pandaka pygmaea</b> Dwarf Pygmy Goby)	IUCN Red List Status: critically endangered (CR); rare; very restricted range; impacted by habitat modification and degradation	8	8		<b></b>	

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Paracheilinus carpenteri (Pink flasher)	IUCN Red List Status: data deficient (DD); rare	<u>:</u>		<b>(</b>		
Paracheilinus dispilus (Flasher Wrasse)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Paracirrhites bicolor (Bicolor Hawkfish)	IUCN Red List Status: data deficient (DD); rare	$\ominus$		÷		
Phycodurus eques (Leafy Seadragon)	IUCN Red List Status: near threatened (NT); rare; endemic to Southern Australia	<u> </u>	<b>—</b>			
Phyllopteryx taeniolatus (Common Seadragon)	IUCN Red List Status: near threatened (NT); rare; endemic to Southern Australia	<u>.</u>	<b></b>			
<i>Platax pinnatus</i> (Dusky Batfish)	IUCN Red List Status: not assessed; available from captive breeding			<b></b>		$\odot$
Platygillellus altivelis (Sailfin Stargazer)	IUCN Red List Status: near threatened (NT); restricted range; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		<b></b>		<b></b>	
Platygillellus rubellulus (Shortfin Sand Stargazer)	IUCN Red List Status: vulnerable (VU); very restricted range, endemic to the Galápagos Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		٢	
Pomacanthus annularis (Bluering Angelfish)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Priolepis ascensionis <sup>(Goby)</sup>	IUCN Red List Status: endangered (EN); restricted range, endemic to Ascension and St. Helena Islands		8			
Prionurus chrysurus (Yellowtail Sawtail)	IUCN Red List Status: data deficient (DD)			<b>e</b>		
Prionurus scalprum (Japanese Sawtail)	IUCN Red List Status: data deficient (DD)			<b></b>		
Pseudocoris aequalis <sup>(Wrasse)</sup>	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Pseudocoris ocellata <sup>(Wrasse)</sup>	IUCN Red List Status: data deficient (DD); restricted range			<b>(</b>		
Pseudogramma axelrodi <sup>(Podge)</sup>	IUCN Red List Status: near threatened (NT); restricted range		<b>—</b>			
<i>Pseudojuloides atavai</i> (Polynesian Slender Wrasse)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by the marine aquarium trade			•	<b>(</b>	
Pseudojuloides cerasinus (Long Blue-lined Wrasse)	IUCN Red List Status: data deficient (DD); potentially overfished by the marine aquarium trade			<b>(</b>	<b>(</b>	
Pseudojuloides xanthomos (Yellow Slender Wrasse)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Pterapogon kauderni (Banggai Cardinalfish)	IUCN Red List Status: endangered (EN); very restricted range, endemic to the Banggai Islands off Sulawesi, Indonesia; potentially overfished by the marine aquarium trade; available from captive breeding	<b>:</b>	8		۲	٢

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Requiem Sharks (Carcharhinidae)	IUCN Red List Status: endangered (EN); slow growth; low fecundity, mature late; thus potentially overfished by targeted fishery and as bycatch of commercial fisheries		8		3	
Roundheads or Marine Betta (Plesiopidae)	IUCN Red List Status: not assessed; many species available from captive breeding			÷		$\odot$
Rudarius ercodes (Whitespotted Pygmy Filefish)	IUCN Red List Status: not assessed; available from captive breeding					$\odot$
Sanopus astrifer (Whitespotted Toadfish)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by habitat modification and degradation		()		<b></b>	
Sanopus splendidus (Splendid Toadfish)	IUCN Red List Status: endangered (EN); restricted range; impacted by habitat modification and degradation		()		<b></b>	
Scartella cristata (Molly Miller)	IUCN Red List Status: least concern (LC); available from captive breeding					$\odot$
Scartella nuchifilis (Mottled Blenny)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to Ascension; impacted by habitat modification and degradation		8		<b></b>	
<i>Scartella poiti</i> (Trinidade Blenny)	IUČN Red List Status: vulnerable (VU); restricted range, endemic to Trinidade Island, Brazil; impacted by habitat modification and degradation		8			
Scartella springeri (Springer's Blenny)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to St. Helena Island; impacted by habitat modification and degradation		$\overline{\mathbf{S}}$			
Scarus coelestinus (Midnight Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished			<b></b>	÷	
Scarus guacamaia (Rainbow Parrotfish)	IUCN Red List Status: near threatened (NT); rare; potentially overfished; impacted by habitat modification and degradation	<b>:</b>	<b></b>		÷	
Scarus hypselopterus (Yellow-tail Parrotfish)	IUCN Red List Status: near threatened (NT); rare; potentially overfished; impacted by habitat modification and degradation	<b>:</b>	<b>:</b>		÷	
Scarus maculipinna (Spot-fin Parrotfish)	IUCN Red List Status: data deficient (DD); relative restricted range; impacted by habitat modification and degradation			<b>•</b>	÷	
Scarus obishime (Yellowtail Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>:</b>	÷	
Scarus ovifrons (Knobsnout Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished			<b></b>	<b></b>	
Scarus trispinosus (Greenback Parrotfish)	IUCN Red List Status: endangered (EN); restricted range; potentially overfished; impacted by habitat modification and degradation		8		8	
Scarus zelindae (Zelinda's Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished				÷	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
<b>Scarus zufar</b> (Dhofar Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished			<b>:</b>	<b>:</b>	
Scorpaena annobonae (Annobon Scorpionfish)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Scorpaena ascensionis (Ascension Scorpionfish)	IUCN Red List Status: endangered (EN); restricted range		3			
Scorpaena azorica (Azore Scorpionfish)	IUCN Red List Status: data deficient (DD); restricted range					
Scorpaena canariensis (Rascacio)	IUCN Red List Status: data deficient (DD); restricted range					
Scorpaena guttata (California Scorpionfish)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Scorpaena mellissii (Melliss's Scorpionfish)	IUCN Red List Status: endangered (EN); restricted range		8			
Scorpaenodes africanus (African Speckled Scorpionfish)	IUCN Red List Status: data deficient (DD); restricted range					
Scorpaenodes arenai (Messina Rockfish)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Scorpaenodes elongatus (African Large-spotted Scorpionfish)	IUCN Red List Status: data deficient (DD); restricted range					
Seahorses (Genus <i>Hippocampus</i> )	IUCN Red List Status: Vulnerable (VU) and Data Deficient (DD); listed by CITES due to being impacted by collection for traditional medicine, food, curio trade; unsustainable if not bred; many species available from breeding		8		8	©
Sebastapistes taeniophrys (Eyebrow Scorpionfish)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Semicossyphus darwini (Galápagos Sheephead Wrasse)	IUCN Red List Status: data deficient (DD); restricted range					
Semicossyphus pulcher (California Sheephead)	IUCN Red List Status: vulnerable (VU); potentially overfished by recreational and commercial fishery		8		<b></b>	
Semicossyphus reticulatus (Asian Sheephead Wrasse)	IUCN Red List Status: data deficient (DD); potentially overfished			<b></b>	<b>(</b> )	
Siokunichthys bentuviai (Barred Xenia-Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>•</b>	<b></b>	
Siokunichthys breviceps (Softcoral Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>(</b>	<b>:</b>	
Siokunichthys herrei (Spotted Xenia-Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>(</b>	<b>:</b>	
Siokunichthys striatus (New Caledonian Soft-coral Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>(</b>	<b>:</b>	
Snapper (Lutjanidae)	IUCN Red List Status: vulnerable (VU); potentially overfished by commercial fisheries		8		:	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Solegnathus dunckeri (Red-and-Gold Pipehorse)	IUCN Red List Status: data deficient (DD); restricted range; impacted by collection for traditional medicine and as bycatch to demersal fisheries			<b></b>	<b>:</b>	
Solegnathus hardwickii (Hardwicke's Pipehorse)	IUCN Red List Status: data deficient (DD); restricted range; impacted by collection for traditional medicine and as bycatch to demersal fisheries			<b>(</b>		
Solegnathus lettiensis (Günther's Pipehorse)	IUCN Red List Status: data deficient (DD); restricted range; impacted by bycatch to demersal fisheries			<b></b>	<b></b>	
Solegnathus robustus (Robust Spiny Pipehorse)	IUCN Red List Status: data deficient (DD); restricted range; impacted by collection for traditional medicine and as bycatch to demersal fisheries			<b></b>	÷	
Solegnathus spinosissimus (Australian Spiny Pipehorse)	IUCN Red List Status: data deficient (DD); restricted range; impacted by collection for traditional medicine and as bycatch to demersal fisheries			<b>(</b>	÷	
Sparisoma axillare (Gray Parrotfish)	IUCN Red List Status: data deficient (DD); potentially overfished			<b></b>	÷	
Sparisoma frondosum (Agassiz's Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished			<b></b>	÷	
Sparisoma griseorubrum (Grey Parrotfish)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Sphaeramia nematoptera (Pajama cardinalfish)	IUCN Red List Status: not assessed; available from captive breeding			<b>(</b>		$\odot$
Sphoeroides georgemilleri (Plaincheek Puffer)	IUCN Red List Status: data deficient (DD); restricted range			<b>(</b>		
<b>Starksia galapagensis</b> (Galapagos Blenny)	IUCN Red List Status: near threatened (NT); restricted range, endemic to the Galápagos Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		<b>:</b>		<b>:</b>	
<i>Starksia hoesei</i> (Hose Blenny)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Starksia lepidogaster (Scalybelly Blenny)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Starksia leucovitta (Whitesaddle Blenny)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Starksia posthon (Brownspotted Blenny)	IUCN Red List Status: data deficient (DD); restricted range			$\Theta$		
<i>Starksia sella</i> (Darksaddle Blenny)	IUCN Red List Status: data deficient (DD); restricted range			e		
Starksia springeri (Springer's Blenny)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
<i>Starksia y-lineata</i> (Forked Bar Blenny)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Stegastes baldwini (Clipperton Gregory)	IUCN Red List Status: near threatened (NT);very restricted range, endemic to Clipperton Island reefs, thus at potential risk of overfishing	<b>:</b>	<u>:</u>			
Stegastes beebei (Galapagos Ringtail Damselfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Galapagos Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Stegastes leucorus (Whitetail Damselfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Revillagigedo Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation); available from captive breeding		8		•	©
Stegastes redemptus (Clarion Damselfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Revillagigedo Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Synchiropus stellatus (Starry Dragonet)	IUCN Red List Status: not assessed; available from captive breeding			<b></b>		$\odot$
Synchiropus ocellatus (Ocellated Dragonet)	IUCN Red List Status: not assessed; available from captive breeding			<b></b>		$\odot$
Syngnathus carinatus (Cortez Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by bycatch to demersal fisheries			•	e	
Syngnathus euchrous (Chocolate Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by bycatch to demersal fisheries			•	<b>(</b>	
Syngnathus louisianae (Chain Pipefish)	IUCN Red List Status: data deficient (DD); impacted by bycatch to demersal fisheries and habitat modification and degradation			<b>(</b>	<b>(</b>	
Syngnathus macrobrachium (Large-fin Pipefish)	IUCN Red List Status: data deficient (DD); impacted by habitat modification and degradation			•	÷	
Syngnathus makaxi (Makax's Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			•	e	
<b>Syngnathus schmidti</b> (Black Sea Pelagic Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			•	<b>(</b>	
<b>Syngnathus taenionotus</b> (Darkflank Pipefish)	IUCN Red List Status: data deficient (DD); impacted by habitat modification and degradation			<b></b>	÷	
Syngnathus phlegon (Pelagic Spiny Pipefish)	IUCN Red List Status: data deficient (DD); rare	:		<b></b>		
Syngnathoides biaculeatus (Alligator Pipefish)	IUCN Red List Status: data deficient (DD); impacted by collection for traditional medicine			•	<b>(</b>	
Syngnathus tenuirostris (Narrow-snouted Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>(</b>	<b>(</b>	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
Syngnathus variegatus (Thickly Snouted Pipefish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>:</b>	÷	
<b>Takifugu basilevskianus</b> (Fugu Pufferfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries			<b></b>	÷	
Takifugu chinensis (Chinese Puffer)	IUCN Red List Status: critically endangered (CR); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries		8		8	
Takifugu plagiocellatus (Hainan Puffer)	IUCN Red List Status: endangered (EN); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries		8		8	
<b>Takifugu flavidus</b> (Tawny Puffer)	IUCN Red List Status: near threatened (NT); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries		<b></b>		<b>:</b>	
Takifugu ocellatus (Ocellated Puffer)	IUCN Red List Status: near threatened (NT); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries		<u>:</u>		<b>:</b>	
<i>Takifugu pseudommus</i> (Fugu Pufferfish)	IUCN Red List Status: data deficient (DD); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries			<b>(</b>	÷	
<b>Takifugu rubripes</b> (Japanese Pufferfish)	IUCN Red List Status: near threatened (NT); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries		<b>:</b>		<b>:</b>	
Takifugu vermicularis (Purple Puffer)	IUCN Red List Status: near threatened (NT); restricted range; potentially overfished by Fugu fishery or multi-species trawl and driftnet fisheries		<u>:</u>		<b>:</b>	
Thalassoma ascensionis (Greenfish)	IUCN Red List Status: data deficient (DD); restricted range, endemic to the Ascension Island	÷		<b>:</b>		
Thalassoma loxum (Slant-band Wrasse)	IUCN Red List Status: data deficient (DD); restricted range			÷		
Thalassoma robertsoni (Clipperton Wrasse)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Clipperton Island; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)	<b>:</b>	8		٢	
Thalassoma sanctaehelenae (St. Helena Wrasse)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Thalassoma septemfasciatum (Seven-banded Wrasse)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Thalassoma virens (Emerald Wrasse)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Revillagigedo and Clipperton Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Tigrigobius redimiculus (Cinta Goby)	IUCN Red List Status: vulnerable (VU); restricted range; impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<b>:</b>	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
<i>Tigrigobius harveyi</i> (Cayman Greenbanded Goby)	IUCN Red List Status: endangered (EN); restricted range; impacted by habitat modification and degradation, and predation by the invasive lionfish		8		<b>:</b>	
Tomicodon absitus (Distant clingfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Revillagigedo Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
Tomicodon abuelorum (Grandparents Clingfish)	IUCN Red List Status: endangered (EN); restricted range; impacted by habitat modification and degradation		8		<b>:</b>	
Tomicodon bidens (Bifid clingfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Gulf of Panama; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
<i>Tomicodon clarkei</i> (Coral Clingfish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation				÷	
Tomicodon lavettsmithi (Reticulate Clingfish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			<b>=</b>	÷	
<i>Tomicodon prodomus</i> (Ecuadorian Clingfish)	IUCN Red List Status: data deficient (DD); restricted range; impacted by habitat modification and degradation			•	e	
Tomicodon vermiculatus (Vermiculate Clingfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Cocos Island, Costa Rica; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		٢	
Torpedos & Electric Rays (Torpedinidae)	IUCN Red List Status: Data Deficient (not all species classified); low resilience; bycatch to demersal fisheries			<b>=</b>	÷	
<i>Torquigener hicksi</i> (Hick's Toadfish)	IUCN Red List Status: data deficient (DD); restricted range			÷		
<i>Torquigener marleyi</i> (Slender blaasop)	IUCN Red List Status: data deficient (DD); restricted range			<b>e</b>		
Torquigener randalli (Randall's Puffer)	IUCN Red List Status: data deficient (DD); restricted range			<b></b>		
Wetmorella tanakai (Pygmy Possum Wrasse)	IUCN Red List Status: data deficient (DD); restricted range					
Whiptail Stingrays (Dasyatidae)	IUCN Red List Status: near threatened (NT); low resilience; potentially overfished as bycatch to demersal trawl fisheries		$\bigcirc$		<b></b>	
Xenocys jessiae (Black-striped Salema)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Galápagos Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		<b>:</b>	
<b>Xyrichtys victori</b> (Galapagos Razorfish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Galápagos Islands; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		3		<b>:</b>	

Family/Genus/Species	Relevant species characteristics	1) Rarity	2) Stock Status IUCN: Threatened	3) Stock Status IUCN: Not assessed or data deficient	4) Stock Status: Alternative threats	5) Available from breeding
(Cipperton Razonish)	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Clipperton Island; impacted by oceanographic environmental changes (e.g. El Nino Southern Oscillation)		8		9	
Zebrasoma gemmatum (Jewelled Tang)	IUCN Red List Status: data deficient (DD); rare; restricted range; potentially overfished by the marine aquarium trade	<b></b>		•	<b>(</b>	
a <b>-</b>	IUCN Red List Status: data deficient (DD); rare; potentially overfished by the marine aquarium trade	<b></b>		<b></b>	<b>:</b>	
	IUCN Red List Status: vulnerable (VU); restricted range, endemic to the Hundred Islands, Lingayen Gulf		8			
(Throadfin Cordinalfich)	IUCN Red List Status: not assessed; available from captive breeding			÷		$\odot$

Further Information:

http://www.iucnredlist.org/