



Sustainable Aquarium Industry Association

List of Species Unsuitable for the Average Marine Hobbyist with a Community Reef Tank (Tank size \leq 1000 liters)

Purpose

The primary objective of this list is to raise awareness for a responsible, ethical, and sustainable hobby and trade by educating the average marine aquarist about difficulties in keeping the listed organism. For the industry, the list serves as guidance on which species to avoid when placing an order; and note the exception of cases where the buyer either has a proven record of being capable of caring for such specimens or is requesting for the purpose of breeding or research.

Criteria of Unsuitability

- ① **Diet** Require a specialized diet, which is difficult to duplicate in captivity and/or endangering prey species in a reef community tank (e.g., coral polyps, sponges, tunicates).
- ② **Habitat** Require a specialized, well established habitat, which is difficult to simulate adequately (e.g., deep sand bed, complete reef community including benthic micro-organisms, ample swimming spaces, adequate pressure to depths more than 10 m depth, (i.e., at least 2 bar)).
- ③ **Aggressiveness** Extremely aggressive/competitive and/or territorial species, which are unsuitable for community tanks, especially of restricted size.
- ④ **Size** Grow too large for the average home tank (estimated to range on average from 30 to 1500 liters in EU), may require tanks of \geq 5000 litres. An adequate tank size provides not only sufficient water volume to cover the organisms, but also space for an adequate habitat, considering maximum body size AND behaviour (e.g., of semi-pelagic species). Remember that the available swimming space is further reduced by decoration and substrate!
- ⑤ **Stress** Those species that are sensitive and stressed easily, thus transport sensitive and susceptible to parasites and disease. This classification also includes species that tend to survive in captivity only when kept in large shoals, species that generally show poor survival in tanks, and those that are collected from deep water often with insufficient decompression measures.
- ⑥ **Potentially harmful** Information on venomous/harmful species is provided, although this is not the crucial factor in determining unsuitability of a species.




Disclaimer

































This list of fish species unsuitable for the average hobbyist is based on intensive research in a variety of databases and has been prepared with the utmost care. Nevertheless, we cannot claim the information to be complete and assume no liability for its correctness.

Please help to expand or revise the list. If you have any objections to this information, please send an e-mail to: vorstand@esaia.net. We'll review and evaluate your comments and update our information, provided you can justify your objection reasonably. Comments like "I have kept this fish for years" are generally ignored unless you can provide substantive evidence to counter to our extensive research.

The list is intended as a tool to help the average aquarist stock his tank in a responsible manner. It does not release him/her from the full responsibility of seeking additional advice on the species' nutritional and physiological needs, compatibility, and its behaviour (further information sources are listed below). Please observe all applicable national regulations and animal welfare

Legend

Highly unsuitable	
Relatively unsuitable	
Partly suitable	

SAIA List of Species Unsuitable for the Average Marine Hobbyist with a Community Reef Tank (Tank size ≤ 1000 l)							
Family/Genus/Species	Relevant species characteristics	Suitability Criteria (see below for details)					
		Diet ①	Habitat ②	Aggressiveness ③	Size ④	Stress ⑤	Potentially harmful ⑥
Angelfish (<i>Pomacanthidae</i>) Exception: Genus <i>Centropyge</i> (pygmy angelfish)	Maximum size up to 60 cm (24 inches); feed on algae, sponges, ascidians, and coral polyps; some species are transport sensitive						
<i>Centropyge boylei</i> (Peppermint angelfish)	Occur in depths of 53 to 120 m; transport sensitive						
<i>Centropyge multicolor</i> (Multicolor angelfish)	Occur in depths of 20 to 115 m; cryptic; transport sensitive						
<i>Paracentropyge multifasciata</i> (Barred angelfish)	Occur in depths up to 70 m; secretive; rarely leave their burrow; difficult to get to feed; starve often to death						
Anglerfish / Frogfish (<i>Antennariidae</i>)	Adults/juveniles found in depths of up to 300 m (with <i>Histrio histrio</i> as only exception of approx. 50 species); predators; require live feed; transport sensitive						
Butterflyfish (<i>Chaetodontidae</i>)	Coral polyp feeder; difficult to adjust to substitute feed						
Boxfish (<i>Ostraciidae</i>)	Maximum size up to 50 cm (20 inches); transport sensitive; under stress release a toxin lethal to other fish						
Genera <i>Aspidontus</i> and <i>Plagiotremus</i> Combtooth blennies	Predators, specialized to feed on skin or fins of larger fishes, with mimic as cleaner fish						
Genus <i>Xiphasia</i> Combtooth blennies	Occur in depths of up to 1100 m; required deep sand beds						
<i>Exallias brevis</i> (Leopard blenny)	Obligatory coral polyp feeder						
Conger & Garden Eels (<i>Congridae</i>)	Require deep sand beds; often transport sensitive; feed mainly on zooplankton						
Dragonnets (<i>Callionymidae</i>)	Specialized feeders; require a well-established tank with ample microfauna						
Eeltail catfish (<i>Plotosidae</i>)	Schooling fish; predators; feed on invertebrates and small fish; potentially harmful (some species with poisonous spines)						
Filefish (<i>Monacanthidae</i>) Exception: Genera <i>Acreichthys</i> and <i>Pervagor</i>	Maximum size up to 110 cm (43 inches); feed on coral polyps and small benthic invertebrates						
Fusiliers (<i>Caesionidae</i>)	Maximum size up to 60 cm (24 inches); active swimmers; require ample swimming space						

Family/Genus/Species	Relevant species characteristics	Diet ①	Habitat ②	Aggressiveness ③	Size ④	Stress ⑤	Potentially harmful ⑥
Ghost Pipefish (<i>Solenostomidae</i>)	Very transport sensitive; require live feed, e.g., crustaceans (order Mysida)	☹️				☹️	
<i>Gnathanodon speciosus</i> (Golden trevally)	Maximum size up to 120 cm (47 inches); active swimmers; schooling fish; often imported as juvenile				☹️		
Goatfish (<i>Mullidae</i>)	Maximum size up to 40 cm (24 inches); require ample swimming space and deep sand beds; schooling fish; predators; feed on benthic invertebrates and small fish	☹️	☹️		☹️		
Lanterneye/flashlight fish (<i>Anomalopidae</i>)	Nocturnal; highly sensitive to daylight; require dimmed light		☹️				
<i>Lythrypnus dalli</i> (Blue-banded goby)	Occur in depths down to 76 m; prefer sub-tropical temperatures of 18–20°C; require a specialised tank		😊				
Moorish idol (<i>Zanclidae</i>)	Difficult to settle in and get to feed; susceptible to disease	☹️				☹️	
Moray eels (<i>Muraenidae</i>) Exception: Genus <i>Echidna</i>	Maximum size ranges from 23 to 400 cm (9 to 158 inches); secretive; require special set up of tank; predators; potentially harmful (bite often causes severe bacterial infections) but not venomous		☹️	☹️	☹️		☹️
Parrotfish (<i>Scaridae</i>)	Maximum size ranges from 20 to 130 cm (8 to 50 inches); rasp their teeth constantly on coral skeleton to wear away teeth	😊			☹️		
Pinecone fish (<i>Monocentridae</i>)	Occur mainly in depths of 30 to 300 m; feed mainly on zooplankton	😊	☹️				
Pipefish and Seahorses (<i>Syngnathidae</i>)	Slow swimmers and feeders; require specially designed tank; often only accept live feed (e.g., crustaceans of order <i>Mysida</i>)	☹️	☹️			😊	
Porcupinefish (<i>Diodontidae</i>)	Maximum size up to 91 cm (36 inches); require ample swimming space; feed on invertebrates; transport sensitive; potentially harmful (sharp spines; some species are poisonous)	☹️			☹️		😊
Puffers (<i>Tetraodontidae</i>) Exception: Genus <i>Canthigaster</i>	Maximum size up to 120 cm (47 inches); require ample swimming space; territorial; some species can become aggressive; poisonous	😊		☹️	☹️		☹️
<i>Canthigaster coronata</i> (Crowned puffer)	Occur in depths of 23 to 165 m; their teeth grow continuously, replacing material worn away by feeding on hardshelled invertebrates; transport sensitive	😊	☹️			😊	
<i>Canthigaster epilampra</i> (Lantern toby)	Occur in depths of 24 to 60 m; their teeth grow continuously, replacing material worn away by feeding on hardshelled invertebrates; transport sensitive	😊	☹️			😊	
<i>Canthigaster leoparda</i> (Leopard sharpnose puffer)	Occur in depths of 30 to 50 m; their teeth grow continuously, replacing material worn away by feeding on hardshelled invertebrates; transport sensitive	😊	☹️			😊	
Rays and Sharks (<i>Chondrichthyes</i>)	Maximum size up to 750 cm (295 inches); most are active swimmers; predators	☹️			☹️		☹️
Scorpionfish (<i>Scorpaenidae</i>)	Nocturnal; predators; require live feed; potentially harmful (venomous spines)	☹️					☹️
Seabasses and Groupers (<i>Serranidae</i>) Exception: subfamily <i>Anthias</i> (<i>Anthiinae</i>)	Maximum size up to 250 cm (98 inches); require ample swimming space; predators	😊		😊	☹️		

Family/Genus/Species	Relevant species characteristics	Diet ①	Habitat ②	Aggressiveness ③	Size ④	Stress ⑤	Potentially harmful ⑥
<i>Nemanthias carberryi</i> (Threadfin anthias)	Require constant feed (zooplankton) in relatively deep water (10 to 30 m); difficult to settle in	☺	☺			☹	
<i>Odontanthias borbonius</i> (Checked swallowtail)	Occur in depths of 70 to 300 m (pressure: minimum of 8 bar); prefer cooler temperatures and dimmed light		☹				
<i>Pseudanthias bicolor</i> (Bicolor anthias)	Occur in depths of 5 to 68 m; require constant feed; transport sensitive; difficult to settle in	☺	☺			☺	
<i>Pseudanthias ignitus</i> (Flame anthias)	Occur in depths of 10 to 30 m; require constant feed; transport sensitive; difficult to settle in; susceptible to disease	☺	☺			☺	
<i>Pseudanthias lori</i> (Lori's anthias)	Occur in depths of 7 to 70 m; require constant feed; transport sensitive; difficult to settle in; susceptible to disease	☺	☺			☹	
<i>Pseudanthias pascalus</i> (Amethyst anthias)	Maximum size up to 20 cm (9 inches); occur in depths of 5 to 60 m; require constant feed; transport sensitive; difficult to settle in	☺	☺			☺	
<i>Pseudanthias pleurotaenia</i> (Square-spot fairy basslet)	Occur in depths of 5 to 180 m; schooling fish; require constant feed; transport sensitive; difficult to settle in	☺	☺			☺	
<i>Pseudanthias thompsoni</i> (Hawaiian anthias)	Maximum size up to 22 cm (9 inches); occur in depths of 5 to 190 m; require constant feed; transport sensitive; difficult to settle in	☺	☺			☺	
<i>Pseudanthias tuka</i> (Yellowstriped fairy basslet)	Occur in depths of 10 to 35 m; predominantly in schools of 20 to 30 individuals; transport sensitive; difficult to settle in, especially juveniles; susceptible to disease	☺	☺			☹	
<i>Pseudanthias ventralis</i> (Longfin anthias)	Occur in depths of 25 to 120 m; secretive; require constant feed; transport sensitive; difficult to settle in	☺	☹			☹	
Seamoths (Pegasidae)	Occur at depths of at least 80 m (maximum of 290 m!); feed on coral polyps, tunicates and worms; transport sensitive	☹	☹			☹	
Snapper (Lutjanidae)	Maximum size ranges from 25 to 150 cm (10 to 59 inches); often in significant depths; predators	☺	☺	☺	☹		
Snipe- and Shrimpfishes (Centriscidae)	Schooling fish; feed only on zooplankton; transport sensitive	☺				☹	
Spatfish and Batfish (Ephippidae)	Maximum size up to 70 cm (28 inches); occur in depths of at least 20 m; often schooling; feed on algae and jellyfish; transport sensitive				☹	☺	
Squirrel- and Soldierfish (Holocentridae)	Maximum size up to 60 cm (24 inches); Schooling fish; nocturnal; feed only on zooplankton; transport sensitive	☺	☹		☹	☺	
Stonefish (Synanceiidae)	Secretive; predators; require live feed; potentially harmful (venomous spines)	☹					☹
Surgeonfish (Acanthuridae) Exception: <i>Zebrasoma flavescens</i> , <i>Z. rostratum</i> , <i>Z. xanthurum</i>	Maximum size up to 70 cm (28 inches); require ample swimming space; many species susceptible to disease; some species transport sensitive; some species aggressive and territorial			☺	☹	☺	
Sweetlips and Grunts (Haemulidae)	Maximum size ranges from 25 to 105 cm (10 to 42 inches); adults mostly nocturnal				☹		
Tilefish (Malacanthidae)	Maximum size up to 60 cm (24 inches); occur in depths of 45 to 180 m; transport sensitive		☺		☹	☹	

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Triggerfish <i>(Balistidae)</i>	Maximum size up to 75 cm (30 inches); require ample swimming space; feed on hard shelled invertebrates	☹️		😊	☹️		
Trumpetfish <i>(Aulostomidae)</i>	Maximum size ranges from 75 to 100 cm (30 to 40 inches); active swimmers; predators	😊	☹️		☹️		
Wrasse <i>(Labridae)</i> Exception: Genera <i>Labroides</i> , <i>Cirrhitilabrus</i> ; <i>Paracheilinus</i> , <i>Pseudocheilinus</i> , <i>Wetmorella</i>	Maximum size up to 230 cm (91 inches); require ample swimming space and deep sand beds to bury at night; transport sensitive; some species can become aggressive		☹️	😊	☹️	☹️	
Worm & Snake Eels <i>(Ophichthidae)</i> Exception: Genus <i>Myrichthys</i>	Maximum size ranges from 50 to 110 cm (20 to 43 inches); secretive; require special set up of tank with deep sand bed; predators of fish and crustacea	😊	☹️		☹️		

Further information:

www.fishbase.org

www.saltcorner.com

www.liveaquaria.com/general/compatibility_chart.cfm