

## Ten Great Saltwater Fish

**These ten great marine fish can make keeping saltwater fish easy.**

*By Jay Hemdal*

My definition of a saltwater fish worthy of recommendation combines three factors: great colors, interesting habits and adaptability to aquarium life. In other words, the fish should be both desirable to keep and easy to care for.

As a result, advanced hobbyists will probably consider my recommendations for saltwater fish to be rather conservative. Beginners or aquarists of limited experience, however, will enjoy much greater success by choosing from what I consider to be the top ten saltwater aquarium fish.

The fish described below represent what I feel are the best individual species from ten families of fish. Bear in mind that these selections are my opinions developed as a result of personal experience. There are, in fact, probably several species in each family that would make excellent aquarium inhabitants. Before specific information about the fish I am recommending can be utilized, however, some basic concepts about saltwater aquariums must be understood.

The first and most obvious requirement is that you have a properly set up and maintained aquarium. Without going into great detail, it is essential that certain water quality parameters exist. The water temperature should be between 78 and 80 degrees Fahrenheit. Specific gravity — the salinity of the water — should be between 1.018 and 1.020. I prefer using a slightly lower specific gravity because evaporation will not cause the water to become excessively salty. The pH should be somewhere between 8.0 and 8.2. Ammonia must be below 0.05 parts per million (ppm), nitrite below 0.5 ppm and nitrate below 50.0 ppm. Some test kits for ammonia and nitrite do not have fine enough gradations to measure very minute quantities and will simply register zero if the ammonia and nitrite are at safe levels.

The aquarium lights should be on for 12 to 16 hours per day. If a biological filter — either undergravel or trickle (wet/dry) — is used, it should be fully broken in and capable of handling a normal biological load. If live rock is used for biofiltration, it must be fully cured before fish are added to the aquarium. A protein skimmer is always desirable. Adequate aeration is absolutely necessary to ensure sufficient dissolved oxygen in the water. If you use powerheads on an undergravel filter and they don't provide aeration for the water, airstones must be added.

I cannot overemphasize that the fish I'm recommending will only do well if kept in a saltwater aquarium that is running correctly. Of course, no matter how hardy a species of fish is supposed to be, if you don't acquire healthy specimens there is little chance of success.

Finding healthy fish starts with choosing a reputable store to do business with. Some employees will get to know you and your aquarium, making it easier for them to help you with any problems you might encounter. The price of the fish is really much less important than things such as the quality of the fish, the knowledge of the staff and even how clean the store is. If a fish is \$20 at your regular dealer and \$10 down the street, but the \$10 fish dies, you haven't saved anything and you may have introduced a disease problem into your aquarium.

### Recommended Foods for Marine Fish

All foods must be of the appropriate size for the fish you are going to feed. The fish should receive small amounts of food, a little at a time, so you can gauge how much they are eating. When you notice that some food settles to the tank bottom and remains uneaten, stop feeding. Keep in mind, of course, that you must also ensure that bottom-dwelling fish receive adequate amounts of food.

Small fish (1 to 2 inches in length) should be fed three to four times each day. Medium-size fish can be fed twice per day. Large predatory fish should be fed daily for five days, and then not fed for two days.

Always handle fish foods as if you are going to consume them yourself. Keep frozen foods solidly frozen until they are fed, and keep dry foods tightly covered. Feed a wide variety of foods to your fish. A minimum of four foods from the list below should be offered weekly. Use at least two different foods each day.

Plant material (in order of preference)

Algae growing in aquarium  
Spinach, romaine lettuce, bok-choy  
Frozen prepared planted-based gel foods  
(anchor plant material at bottom of tank)  
Frozen shellfish

Shrimp (no added sodium bisulphate)  
Krill (two sizes)  
Scallops  
Clams  
Mussels  
White fish flesh

Whole smelt  
Perch  
Cod  
Prepared frozen foods

Brine shrimp (live is preferred if available)  
Bloodworms  
Gelatin-based foods  
Prepared dried foods

Freeze-dried foods  
Flakes

Pellets When choosing fish, look for danger signs of health problems. Cloudy eyes can indicate bacterial or oodinium infections. Scales missing around the head or lateral line are often a disease symptom. Extensive fin damage may be the result of fighting, whereas fins that look cloudy can be the result of a bacterial infection. Any open sores on the body could indicate a bacterial or protozoan problem. White or black spots of any size are generally protozoan in nature. Thinness along the back or nape, not to mention belly, are signs of disease or malnutrition. A lack of interest in food, unusual shyness or other odd behavior are all possible signs of disease.

If the fish passes your initial inspection, ask how long it has been in the aquarium. I would suggest a minimum of one week so that signs of disease or other problems as a result of collection or shipment will show up in the dealer's aquarium and not in yours. Go home without buying the fish and read all you can about the species, including habits, space, food requirements and so on. Go back to the store and ask the dealer's advice about the species, checking this information against what you have read.

If you are satisfied that the fish is healthy, eating well and adapting successfully to captivity, it's probably worth buying. If you have a community saltwater aquarium, make sure the more docile fish are introduced first, giving them time to set up territories before more aggressive fish are added.

Most of the species described below will do well on similar fish foods, although they may require different size portions. I have included a small list of preferred foods and some feeding hints in the sidebar to the right. Anything the fish will eat is suitable food, but the hobbyist must provide a balanced diet for the long-term health of the fish.

When it comes to choosing fish for a saltwater aquarium — balancing beautiful colors with hardiness — the damselfish wins hands down. I doubt that many experienced saltwater aquarists would disagree with my choice of damsels for the top of the list. With approximately 235 species worldwide, there is a wide selection of damselfish available. With a few exceptions, the vast majority of damsels are hardy and easy to care for.

There are actually four sub-families in the damsel group with the Pomacentrinae family containing the hardest species. A note of caution with the genus *Chromis* — these damsels can be very delicate and only do well if kept in schools. On the other hand, the yellowtail blue damsel (*Glyphidodontops hemicyaneus*) offers wonderful colors, is very hardy, grows only to about 2 inches and is quite inexpensive. This fish is not as territorial as some species of damsel, and will eat virtually any type of food. In addition, the colors do not fade either with time in captivity or when the fish reaches adulthood, which is not always the case with many species of saltwater fish. Finally, this damsel is not particularly susceptible to disease, although it can succumb to Cryptocaryon and Amyloodinium if left untreated.

Second on my list of recommended fish are the Pseudochromids, commonly known as dottybacks. They are higher in

price than damsels and extremely intolerant of other Pseudochromid species in the same aquarium, but they are very hardy and do not grow larger than 3 inches, making them suitable for even the smallest saltwater aquarium. My favorite species is the bicolor dottyback, which has a purple head and a yellow tail. It looks very similar to the royal gramma but is much hardier. A different Pseudochromid species has the same purple and yellow color combination, but divided between top and bottom. There is one species that is completely purple. Some Pseudochromids are rare and cost more than \$100, but unlike many rare and expensive saltwater fish, these are as hardy as their less expensive cousins.

Number three on the list are the clownfish, a favorite of many aquarists. Due to a combination of poor handling practices during capture and shipment, and high susceptibility to particular diseases, newly acquired specimens may succumb to ich and oodinium. Clownfish are not as hardy as the two previous families of fish, but if successfully acclimated to captivity they can be quite sturdy. The common (percula) clown, *Amphiprion ocellaris*, a favorite with saltwater aquarists, is unfortunately also the most delicate of the group. The larger species, such as the tomato clown, fire clown and sebae clown, are somewhat hardier. My choice is the tomato clown. This species maintains its color well in captivity and seems to do fine without an anemone to live in. They do grow somewhat larger than other clowns, sometimes exceeding 4 inches. Even at that size, however, they do not exhibit significant territorial aggression.

Cardinalfish are choice number four. Although lacking stunning colors, they are hardy and totally without aggression. They generally grow to about 3 inches. Cardinalfish are nocturnal (note their large eyes) and should have hiding places available in the aquarium. When first introduced into your aquarium, leave the lights off to prevent the fish from going into shock. In terms of what species to choose, it's a toss up between the pajama cardinal (*Apogon nematopterus*) from the Pacific and the 15 or so species of red cardinalfish from the Atlantic. The one advantage the pajama has is that it doesn't seem to hide as much as the other species. There are apparently two species of pajama, one having better defined colors than the other.

Next on the list are the blennies. For hobbyists seeking bright colors, these fish won't do at all, but they have great personalities, are very hardy and only grow to about 4 inches. Most blennies lack a swim bladder and therefore stay near the bottom of the aquarium. Blennies have fairly large canine teeth, which they may use against other fish if they feel threatened, although this rarely causes any damage to the fish being attacked. All of the brown- or mottled-colored blennies are hardy. The choice of species depends mostly on what is available. One species commonly seen in stores is the molly miller.

There are some species of blenny that have forsaken staying near the bottom and spend most of their time swimming in open water. These are the forktails and the mimic blennies. Forktailed blennies are often attractively colored but are somewhat more delicate than the bottom-dwelling species. Mimic blennies have evolved a unique method for obtaining food. They have developed colors and patterns that resemble those of other fish. As an example, one Pacific mimic blenny looks like a species of cleaner wrasse. Fish will visit a cleaner wrasse to have parasites removed. When a fish approaches the mimic blenny, which resembles the cleaner wrasse, the blenny takes a bite from the side of the fish. Keeping a mimic blenny in a community aquarium is, needless to say, not a good idea.

Hawkfish occupy spot number six. They have many of the same habits as blennies, but are much more colorful. Sometimes called rock hoppers, they rarely swim more than an inch off the bottom. My pick here is the spotted hawkfish from the Indo-Pacific. There is a similar species from the Atlantic, but it is not as colorful. The two most popular species of hawkfish, the flame and longnose, are difficult to acclimate to the confines of an aquarium, but if they live through the process they can be relatively hardy. One possible reason why these species tend to adapt poorly to captivity may be because they live in deep water.

Fish, like humans, need to decompress when moving from deep to shallow water. In fish, this process can take 10 hours or more. The collector must bring the fish up a few feet and wait a while, repeating this cycle numerous times. Collectors not wanting to take the time to do this properly often use a hypodermic needle to bleed off the excess gas in the swim bladder. This can lead to complications, eventually resulting in the death of the fish.

I have chosen the Canthigasteridae pufferfish for number seven. Although, as a rule, pufferfish are very pugnacious, this group of dwarf puffers is the exception. They rarely exceed 3 inches in length and won't bother other aquarium residents unless you happen to keep invertebrates in the aquarium. These slow-swimming fish use their pectoral fins for propulsion and their tail fin for direction. My favorite puffer is a mimic that matches perfectly the coloration and body shape of the filefish that inhabit the same areas. This mimicry differs from the blenny in that the pufferfish uses the mimicry to hide among the inedible filefish, thus escaping the notice of predators. In fact, one of the best ways to acquire one of these puffers is to look in a shipment of filefish for puffers that were inadvertently included.

For recommendation number eight I've selected the gobies — particularly the Atlantic neon goby. The neon goby, one of

the first fish to be spawned in captivity, is a cleaner fish that, like the cleaner wrasse, is visited by other fish seeking to have parasites removed. Don't expect much of this type of activity in your aquarium, however. First, the parasites that typically infest fish in a home aquarium are too small for gobies to find and eat. Second, in the confines of an aquarium the goby is likely to become sick as well. When this happens, all cleaning activity ceases.

Most species of goby are rather small when mature (less than 3 inches in size) and therefore can be somewhat difficult to feed. Finding food that is small enough while maintaining a balanced diet is a challenge. Brine shrimp is fairly nutritious when alive, but does not provide enough protein when frozen and then thawed. Flake foods can supply additional nutrients, and specialty foods, such as frozen Daphnia, can help complete the diet. As with blennies and hawkfish, gobies lack a swim bladder and will spend much of their time resting on the substrate.

The last two fish on my list are not at all compatible with the other species I've discussed. I've included them as examples of hardy, colorful fish that are suitable for larger saltwater aquariums.

Triggerfish are very popular with hobbyists who have large aquariums housing the more aggressive kinds of saltwater fish. As fish go, triggerfish are relatively intelligent, often learning to recognize the person who feeds them. Triggerfish have sharp teeth and tend to be territorial, so finding suitable tankmates can be a challenge. One solution is to keep the trigger in an aquarium by itself. Of this group, the undulated trigger is probably the hardiest, with the clown trigger being a close second. Large triggers like to redecorate, and can often be seen grabbing a large piece of coral and moving it across the aquarium.

Last on the list are the serranids or groupers. Some species, such as the basslets, are compatible with most of the species already listed. The true groupers, however, which are hardier, grow quite large and are best kept with triggers, lionfish and moray eels. Groupers are carnivorous and have mouths that are very large in proportion to their size. Thus, they are capable of swallowing fish that ordinarily would seem too large to be a meal.

The purpose of this list is to give the beginner and even the more experienced hobbyist a better chance of successfully choosing fish for a saltwater aquarium. This is a list of personal favorites. Your dealer will also be able to provide other recommendations for fish that are colorful, hardy and likely to do well in your aquarium.

Of course, there are literally hundreds of saltwater aquarium fish that can be kept. Many of these have somewhat more demanding requirements than those I've recommended. In addition, there are species that are hardy under normal circumstances, but which require both experience and skill to keep alive if acquired while suffering from the effects of poor collection and shipping practices. These fish were not included in the list presented here.

Finally, there are species of fish offered in aquarium stores that will not survive in captivity under the best of conditions. Despite the efforts of the most experienced aquarist, some species will fail to thrive and will eventually perish in the aquarium. Responsible dealers will not sell customers fish that they know will not live for long in the aquarium.

The most common cause for failing to respond to good care is the lack of a feeding response. In other words, these fish are unable to adapt to the foods the hobbyist is able to offer. Notable among the species that cannot be properly fed are some butterflyfish that feed exclusively on living coral.