

Aquarium Sharks: Keeping Wobbegongs

Can you keep a wobbegong (wobbie) in an aquarium?

By Scott W. Michael

Q. I am very interested in keeping sharks and I'm particularly interested in the wobbegong. I have seen several wobbegongs at a local aquarium store. Could you give me any information about their behavior and what is needed to keep this shark successfully? I have a large acrylic aquarium that is 8 feet long and about 3 feet wide, with a trickle filter and a large protein skimmer.

A. It just so happens that the wobbegongs are some of my favorite fishes in the sea! In fact, a couple years back I spent a month in Australia trying to photograph six of the seven known wobbegong species. I found all but one and was able to spend many hours observing and photographing them.

Although I can understand your desire to keep a wobbie (as they're referred to in Australia) in your home aquarium, I have to discourage you from doing so unless you can find one of the three species that do not reach gargantuan proportions: Ward's wobbegong (*Orectolobus wardi*), Cobbler's wobbegong (*Sutorectus tentaculatus*) and the tasseled wobbegong (*Eucrossorhinus dasypogon*). None of the three is common in the aquarium trade — I've never even seen Ward's wobbegong for sale in this country, although I know it is occasionally collected for the trade, I've only seen the tasseled wobbegong on two occasions, and Cobbler's wobbegong is a resident of cold, south Australian waters and is never collected for the aquarium trade.

These three wobbegongs are more suitable than those commonly seen in aquarium stores because they don't grow as large. Ward's wobbegong reaches a length of 31 inches, while the tasseled wobbegong gets to about 48 inches, so these species could be kept for their entire lives in your aquarium.

The wobbegongs that are more commonly encountered in aquarium stores are the ornate (*Orectolobus ornatus*) and the spotted wobbegong (*O. maculatus*), which attain impressive proportions! The ornate reaches at least 9½ feet, while there are reports of spotted wobbegongs exceeding 10 feet.

Although wobbegongs grow relatively slowly if not overfed, the spotted and ornate wobbies will outgrow your tank in time, and then what will you do with them? Although a larger tank is a possibility, you should consider the costs involved before you even purchase one of these species.

There is also a widely held misconception that every public aquarium has the facilities and desire to take overgrown sharks from marine hobbyists. But, the real truth is that most of these institutions do not have enough room to accept such specimens, and rarely do so.

References

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Releasing a shark back into the wild other than where it normally occurs, or that has been exposed to fish from other regions, is not an option. In the end, about the only thing you can do is to destroy the shark, so please resist the temptation to buy either of the two wobbies that show up regularly in the marine trade, or any shark or ray that you cannot house indefinitely (e.g., nurse sharks, leopard sharks).

Now that you know which wobbies are best suited for the home aquarium, and the potential consequences if you select one of the more commonly available wobbegong species, lets take a brief look at the biology and husbandry of these fascinating animals.

Wobbegongs are known to ambush, stalk and possibly lure their prey. They rely on a quick strike to catch their quarry unaware, and are adorned with spots, bands or reticulations that help them to "disappear" among coral, coralline algae and larger macroalgae. The flaps of skin around the mouth help to break up the body outline of the wobbegong's head, enhancing this resemblance to reef substrate even further. The dermal flaps, and even the skin, of the wobbegong bears a resemblance to certain calcareous algae and encrusting invertebrates. Numerous bonyfishes and some crustaceans that feed on these marine plants and animals may mistake the inactive wobbegong for food-ridden substrate!

At night wobbegongs actively stalk octopuses, squid, crabs, sharks (including other wobbegongs), rays and reef fishes. The jaws are very capacious, enabling them to take a larger range of prey. When the wobbegong succeeds in capturing a larger prey item, it holds it in its vise-like jaws until the prey is subdued. It then manipulates it in its mouth so that the prey is swallowed head first.

Wobbegongs are ideal aquarium sharks — if you have a large enough tank — because of their inactive lifestyles. However, their lethargy is also considered a negative attribute by some aquarists. Yes, there are people out there who think wobbegongs are boring! If you need a fish in your aquarium with a vast behavioral repertoire, then a wobbegong is not for you.

When the lights are on, most wobbies simply lie under a ledge or in a cave until food comes within striking range. With the aid of a red incandescent light you can watch your wobbegong at night, when they are typically more active.

The wobbegongs have low metabolic demands, and therefore can be maintained in good condition on two feedings a week. Monitor your shark's condition by visually examining the dorsal musculature. If it appears to be atrophying, feed your shark more frequently. A wobbegong may not eat when initially introduced into your aquarium. It is not uncommon for this preliminary fast to last as long as 10 to 14 days.

When trying to elicit a feeding response in a fasting "wobbie" you should impale a fresh fish on a feeding stick (I use a sharpened piece of rigid airline tubing), presenting it to the shark head first. Lightly contact the barbels with the food item. If your wobbegong is hungry it will suddenly shoot forward and ingest the food.

It is important not to feed your wobbie large prey items. If they consume a meal that is too large they may become bloated and positively buoyant, so that they float around the surface of the aquarium like a cork. This condition, apparently caused by a buildup of gas in the alimentary tract, often results in the shark regurgitating the semi-digested food item (this makes a stinky mess out of its tank) or possibly in the death of the shark!

Beware, these sharks have enormous mouths and can consume surprisingly large prey. For example, a specimen kept by an acquaintance of mine ate his yellow tang, a triggerfish and a zebra moray eel! They will even snap at and occasionally eat smaller shark and ray tankmates. Because of their fast feeding behavior, hand-feeding a wobbegong is a foolhardy activity! The two wobbegongs discussed below should be maintained at a specific gravity between 1.019 and 1.024, and water temperatures between 72 and 80 degrees Fahrenheit.

Ward's wobbegong (also known as the northern wobbegong) has two dermal lobes below and in front of the eyes on each side of the head, and nasal barbels that are not branched. Their distinctive color pattern consists of large ocelli-like saddles on the back, with a network of light lines on the body that look like the glitter lines that are cast on the sea floor by the sun. This may serve as effective camouflage for this shallow water shark. It ranges from Queensland, Australia, around the north coast to Ningaloo reef, Western Australia. This species is usually observed on shallow reefs, and frequently inhabits tide pools in some areas.

The genus *Eucrossorhinus* is represented by a single species, the tasseled wobbegong, which is considered to be the most specialized of all the wobbies. It is recognized by its very wide head, the edge of which is fringed by a "beard" of dermal flaps, and the presence of dermal lobes on its chin. The tasseled wobbegong is a coral reef dweller that occurs on the coral reefs off Irian Jaya, Indonesia, Papua New Guinea and Australia (Queensland around the northern coast to Western Australia).

Solitary individuals are usually found under table corals, ship wreckage, in caves or beneath ledges during the daytime. While at rest in caves they are often seen with large schools of sweepers hanging over them, and they apparently feed on these fish at will. One unusual posture characteristic to this wobbegong is that it curls its tail up when in repose on the sea floor!

Recently, wobbegongs have been sought out by commercial fisherman for their very palatable flesh. In the last few years, hand-lining for these sharks has been on the increase along the eastern Australian coastline. The popularity of wobbie

flesh became quite apparent to me when visiting the Sydney fish market. I observed dozens of crates filled with the dressed carcasses of spotted and ornate wobbegongs. Like all sharks, wobbegongs are susceptible to overfishing, and, unfortunately for the wobbie populations, no regulations currently exist for this fishery.