

Using body language to measure your fish

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Marine animals – clams, crabs, fish, sea cucumbers, shrimps and turtles – all have to reach a certain size, different for each species, before they can spawn. It is important to leave them in the sea until they have reached that size and have therefore spawned at least once before catching them. Otherwise, there will be fewer parents for the next generation and eventually no more will be left. We also know that in fish species that grow to a large size, such as some groupers, parrotfish and trevallies, the biggest fish are the main producers of eggs and so they, too, should be protected.

Fisheries officers put up notices and posters showing the minimum and maximum sizes for capture in markets and other public places. But these are often a long way from the fisher on the beach or in a boat, and by the time the catch reaches the market – if it goes to the market at all – the animals, other than turtles, are probably all dead.

Most fishers across the Pacific sell their catch at a market or take it home and, with populations getting bigger, it is ever more important to follow the rules on the size of capture to avoid depleting the fisheries. Stiff penalties are sometimes handed out to those who break the rules. The problem is, how to remember all those smallest and largest sizes and apply them when you are far from the market? Here are some suggestions, with diagrams to illustrate them.

Use your fingers

Middle fingers are usually 80–90 mm long. In some places, 80 mm is the smallest allowable length of a ponyfish and the head of a lobster, and the smallest allowable width of a trochus shell and coconut crab carapace.

Use your hands

Measure the length of your hand. Most adult hands are 180–200 mm long. In some areas, the smallest allowable capture length for many reef fish and for giant clams is, coincidentally, 180–200 mm. To be sure those you have caught are legal, throw back any that are not a little longer than your hand.

You can also use the length of your hand palm plus the first joint of your middle finger. It is usually around 130–140 mm, which is the minimum size recommended for mud crab carapace width in several countries.

For those large-growing fish, some have smallest capture lengths of 300–400 mm, which is a little more

than 1½–2 hands. The longest size for such fish may be 400–600 mm, which is 2–3 hands long, if your hand is 200 mm long.

Use your feet

Measure your foot from the back of your ankle. It is probably 250-mm long or more. This represents, in some places, the shortest length for some species of emperors, snappers and squirrelfish that it is legal to catch.

Use your arms and legs

Hawksbill turtles, where they are allowed to be caught, may have a smallest length for capture of 700 mm, roughly the length of your arm from the top of the shoulder. For a green turtle it is 850 mm, the average length of the inner side of your leg.

Use your boat

A few notches in the gunwale of a canoe can become a handy ruler for the main kinds of fish you are targeting. A little paint or permanent marker pen can do a similar job on an aluminium boat.

Use your head

When in doubt, compare a less common species with one of the common ones for which smallest and largest sizes are provided, rather than assuming there is no legal size range because it is not shown in a poster in the market.

Use your eyes

Remembering and applying all those lengths is still a chore and ignorance of the law is no excuse. One way to help remember which sizes belong to which fish is to make a simple drawing on A4- or letter-sized paper of a person's body and write beside it which marine animals have minimum (and maximum) lengths that correspond to the different parts of the body.

Use your mouth

A nice way to help remember the rules is to write a rhyme/song for each body part-fish type combination on the drawing. A trivial English example might be: A trochus must be longer than a finger, so we don't catch a fine from the fisheries inspector. A song (and dance?) could be composed – in your own language – to include all the common rules. Why not have a competition to find the best song?

Finally, in deciding on what approximation to use in all these memory aids, the smallest size recommended or prescribed by scientists need not be followed exactly by fisheries officers, as long as the approximation is conservative. In other words, it can be longer but not shorter than the length of first spawning. In any case, this length is not precise to the millimetre but has a range within and among fish populations. Thus, to keep the number of different sizes to a minimum for ease of remembering, fish with smallest given capture sizes of 180 and 200 mm could be combined as 200 mm and so on.

All this information can fit on a single A4- or letter-sized page. Detailed lengths could be added on the reverse side of the page. Many copies can be made cheaply with a photocopier for wide distribution. In fact, the illustration featured below can also be printed, photocopied and widely distributed. If these sheets can be laminated, they will be durable enough to be tacked to a wall or stored in a boat.

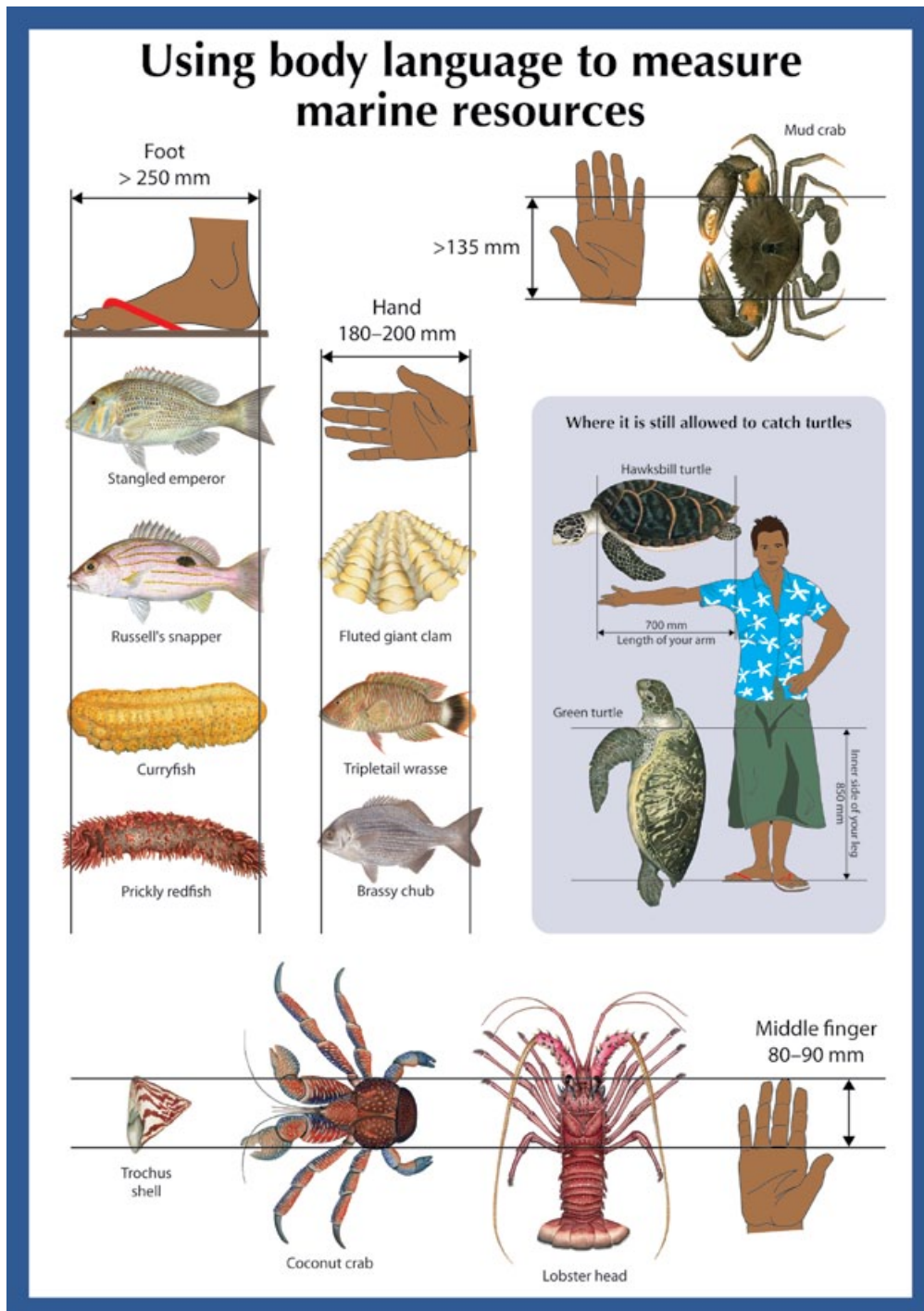


Illustration: Boris Colas, SPC