

Gobies: Lembeh's Underdog Stars

by Sam Robertshaw

The Lembeh Strait in North Sulawesi, Indonesia, is renowned worldwide as one of the premier muck diving destinations. For quite some time, it has been a bucket-list destination for macro enthusiasts, attracting thousands of divers each year.

The reason is simple: the abundant presence of the most famous, rare, and elusive critters that have a place on many diver's wish lists. Divers travel from all around the world to search for species like Hairy Frogfish, Mimic Octopus, Blue-Ringed Octopus, Coleman Shrimp, and Flamboyant Cuttlefish and with a bit of luck in Lembeh it's possible to see all of these amazing critters and a great deal more in just a single day of diving.

Having had the privilege to live and work here for several years, I've come across divers of various backgrounds, ages and with differing levels of experience when it comes to muck diving and macro photography. Despite this, there is a very clear pattern when it comes to what people are hoping to see once they plunge into Lembeh's waters.

One family of fish that often gets overlooked and is rarely requested

are gobies. Gobies are small fish that are found worldwide and are one of the largest families of fish with over 2000 known species, at least 500 of them can be found in the Indo-Pacific region. Their appearance and habitat can vary dramatically between the species meaning whichever dive site you choose, there are always gobies to find.

As for why they are seldom mentioned when divers are asked about what they would like to see, I believe there are a few reasons. One possible explanation is that gobies are often excluded from macro bucket lists due to the abundance of other famous muck critters found in Lembeh. After all, bucket lists can only be so long!

In addition to this, it's very possible that there are many divers who just aren't familiar with gobies at all.

Another reason is that some, if not most, gobies are notoriously tricky to photograph. They are typically very shy fish which is reflected either by their chosen habitat or their extremely skittish behaviour. Lots of patience may be required to take shots of gobies and therefore divers are faced with a dilemma. Do you choose to



A popular subject with all divers, small, cute, brightly coloured and with great big green eyes.....what's not to love about these little Yellow Pygmy Gobies (Lubricogobius exiguus)

*Canon R5, 100mm, Nauticam Housing, 2 INON Z330 strobes
1/200s, f11, ISO 100*

dedicate large portions of your dive to try get a shot or two of a specific goby, or do you take advantage of the numerous critters in Lembeh's waters and take photographs of all of them?

I think for divers who are visiting Lembeh for the first time or those who have limited time here, it's fair to

expect them to want to see as many new critters as possible and take at least a few photos of each of them. There's a good chance that you'd still manage to capture a few shots of the more common goby species whilst you're at it. For those who have "ticked off" many of Lembeh's



Sometimes this may just be the clearest view you get! Living in tightly packed hard coral, these Five-lined Coral Gobies aren't the most helpful when it comes to posing for a photo. Don't try to follow them in the coral, watch their movement and focus on a spot where they like to come back to.

*Canon 1DX, 100mm, Nauticam Housing, 1 INON Z330 strobe
1/200s, f8, ISO 100*



A rare occasion where this Magnificent Shrimpgoby (Tomicodon emilyae) allowed me to get close enough to reach my lens' minimum focus distance.

Canon R5, 100mm, Nauticam Housing, 1 INON Z330 strobe. 1/200s, f8, ISO 100

highlights or for those who are lucky to spend an extended period of time here, gobies are great to delve into. Whether it's to discover new creatures or to explore fresh photo ideas, you will never get bored of gobies.

For me personally, the passion I have for gobies now didn't arrive until relatively late. As with many muck diving lovers, my attention had originally been on creatures such as sea slugs, crustaceans and cephalopods. My favourite critters by far were frogfish and there would be no doubt at all that I would

photograph every frogfish that I happened to swim by. After spending many years photographing these amazing subjects and learning lots about them, my focus turned towards gobies.

I had always been somewhat aware of gobies, I knew they were small, pretty fish that could be found almost anywhere on a dive site and with thousands of species, it was quite difficult to choose where to begin. Once I started working here in Lembeh, they started to attract my interest more and more. They



*Easily one of the most requested critters in Lembeh, the Hairy Frogfish (*Antennarius striatus*) with a bit of backlighting to make those hairs glow!*

*Canon R5, 100mm, Nauticam Housing, 1 INON Z330 strobe, Kraken NR2000 torch.
1/125s, f4, ISO 100*

appeared to be much more plentiful here and the guides here at NAD Lembeh Resort clearly had a very strong passion when it came to spotting them and helping their guests achieve excellent photos.

I took inspiration from my bosses and the owners of the resort, Simon and Zee, who are both very keen goby photographers. I looked to them for help with identification and they gave me tips on where to search for certain species. Another stroke of luck was meeting a couple of

longterm guests Jon and Sakae, who have written a book about the gobies of Lembeh. Their knowledge and insight about goby behaviour, how to photograph them and the variation between species was extremely useful and we've managed to share some amazing "Goby hunting" dives together.

So it was really arriving here in Lembeh, where my addiction to these fascinating little fish started. Soon enough there were dives here where gobies were all I would photograph.



*The Yasha Goby (*Stonogobiops yasha*) is a fan-favourite for goby lovers worldwide however it's not a critter many divers are familiar with worldwide. Quite a rare sighting in Lembeh and as you don't want to scare it back into its burrow, you can feel a bit of pressure taking its photo.*

*Canon 1DX, 100mm, Nauticam Housing, 2 INON Z330 strobes
1/200, f7.1, ISO 100*

Searching for species I hadn't seen yet and trying to improve the photos I had previously taken was always in the back of my mind during every dive. Of course it's impossible to ignore the other magnificent critters here in

Lembeh which I'm still blown away by, but I could not tell you the last time I did a dive where I didn't photograph a single goby or three.

It's hard to say for sure how many individual species of goby

can be found in Lembeh as we are continuously finding species that haven't been previously seen here. So far, at least 300 species have been spotted and photographed in the Lembeh Strait, so it's more than likely that the real number is much higher than that. Akin to other families of reef fish, many gobies share the same appearance with only small distinguishing features that differentiate the species. Identification can often be tricky, as spotting some of the smaller, rather transparent species is a challenge on it's own, let alone photographing them.

For most divers, their first introduction to gobies in Lembeh typically starts with Whip

Coral Gobies. These species, as the name suggests, live on whip corals that are found on all dive sites here. Their movement is a lot more predictable than other gobies because they are constrained to the surface area of the coral on which they reside, this makes them a much easier subject to photograph. You can afford to be slightly picky with which individuals you choose to photograph since they are so abundant, waiting to find one that has a nicely coloured coral ideally where the polyps are open. You have a few different options when shooting them as well depending on the image you are trying to achieve. A narrow aperture to

create a black background is a classic macro photography technique used for these gobies but they are also an excellent subject to open up the aperture and get yourself a brighter or even blue background.

From there the next most common goby to discover is the genus of Ghost Gobies. These little gobies live in many different habitats but these you will often see living on tunicates, sea squirts, sponges and in and amongst hard and soft coral. These gobies are a particularly popular subject, not necessarily due to the fishes' appearance, but because of their chosen habitats and the enhancement it can provide to underwater macro photography. Their vibrant and distinctive habitats offer a unique perspective compared to the typical murky environments encountered on muck dives. Incorporating some nicely coloured pink sponge or soft coral for example, creates an entirely different feel to an image that you may not be able to achieve with other subjects.

Looking to the substrate, we then start to discover the never ending world of Shrimpgobies. These fish share an incredibly interesting relationship with species of Pistol/ Snapping Shrimp. In this mutualistic relationship, they work as a team that benefits both the goby and the shrimp. The shrimp's duty is to dig out



A perfect "starter" goby. Common Ghostgobies (Pleurosicya mossambica) are found on a wide variety of substrate....all you have to do is find one that is perched nicely and shoot away.

*Canon R5, 100mm, Nauticam Housing, 1 INON Z330 strobe
1/200s, f5, ISO 100*

a burrow for them to live in and it will work tirelessly to perfect it. The goby's job is to keep a watchful eye out for any predators. The two of them will keep constant contact through the shrimps antennae and the goby's fins, if there is any danger, the goby will dart into the burrow and the shrimp will follow swiftly.

Many of the most in demand shrimpgobies have beautiful dorsal fins, from intricately detailed fan-shaped fins like the Magnificent

Shrimpgoby or elongated, delicate dorsal fins like the Yasha/Orange-Striped Shrimpgoby. With some species these dorsal fins denote whether an individual is male or female and some species use these dorsal fins as a form of communication, most likely for courting in the same manner as a bird of paradise. Combine these fins with the beautiful colours and patterns on their bodies, shrimpgobies are a truly spectacular subject to photograph.



*Seeing both the Magnificent Shrimpgoby (*Tomyamichthys emilyae*) and its shrimp buddy out of their burrow like this was an extremely lucky sighting, a cleaner background would have been delightful but the subjects take centre stage.*
Canon 1DX, 100mm, Nauticam Housing, 2 INON Z330 strobes
1/200s, f8, ISO 100

Playing with various lighting techniques such as backlighting or snooting is an experiment very worthwhile with these fish. However their incredibly shy nature may not allow you much time before they disappear back into their burrow. Patience and slow movements whilst you creep closer to them is key in order to get close enough to fill the frame.

Next, we begin searching for gobies that not only are incredibly small but also hide within small cracks and crevices in rocks, shells, or coral

formations. Some species that tick those boxes are the Yellow Pygmy Goby, Hairy Goby, Ribbon Reefgoby, Convict Goby and numerous others. These species have become firm favourites for macro photographers mostly due to their incredibly intricate patterns and colours. Yellow Pygmy Gobies are certainly one of the most requested and well known goby species here as they have become quite synonymous with Lembeh diving, much like a Hairy Frogfish for example.

The Yellow Pygmy Gobies are

unique in that they usually live in pairs and choose spots where they can look out safely, knowing they can retreat into their den immediately. They could be hiding in coconut shells, normal seashells and frequently we will also find them in discarded glass beer bottles that provide a perfect shelter for these little gobies to lay their eggs. The shot of a pair of Yellow Pygmy Gobies looking out straight into the camera lens has become a bit of a classic Lembeh photograph and you can certainly play around with that. Using a snoot to only light up the fish is a common technique and some enjoy using coloured lighting on individuals that reside within glass bottles.

Photographing gobies is not always easy and it may well be a big factor as to why divers may prefer creatures like nudibranchs or frogfish where there is significantly less risk that they can quickly dart away or hide. In particular the shrimpgobies and dartfish (which are a member of the goby family) are increasingly difficult to photograph. Patience with slow and steady movements is the name of the game.

For me, capturing goby photos presents an enjoyable challenge, much like blackwater photography where you really feel a great sense of achievement when you achieve a nice image.

Gobies are becoming increasingly popular with the influence of social media and at NAD Lembeh Resort we are undeniably seeing an upwards trend in divers coming here and asking about them. We all know about divers travelling the world looking purely for species of sea slug, I feel soon we may start to have hordes of divers travelling around the world just for gobies. They are incredible subjects to photograph and some can provide a nice little challenge if you felt muck diving was getting too easy!

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