

Text and photos by Mike Bartick

Observing animal behavior is a highpoint of any dive, whether it is watching fish spawn, nudibranchs feeding, or my current personal favorite egg brooding. Getting great images of this type of behavior, however, is quite different then observing and will promise to challenge an underwater photographer on every level. The first step to success on capturing this style of image is becoming a bit more savvy on the intended target, by doing a little research and knowing what to look for and where to find it.

For instance, a common pipefish might carry its developing brood on its belly, in a specially designed flap, while a female ornate ghost pipefish will carry them in a pouch. What I like the most about

That's a mouthful! a sand-dwelling subject that construct buralso where you will find them brooding their upcurrent. Kicking up any sediment not only

Photographing mouth brooders such as this male yellow-barred jawfish (*Opistognathus sp.*) found in Anilao, Philippines, is certainly a lesson in futility and patience. Jawfish are

a sand-dwelling subject that construct burrowed chambers and use shells and stones to fortify their access point. They are opportunity feeders that rarely leave home to find food and would rather wait, perched at the opening of their borrow for a passing snack. This is

also where you will find them brooding their eggs as the passing current not only delivers food but helps to aerate their eggs, often times facing directly into the current line. This behavior is something to keep in mind when positioning yourself this close to the sand and

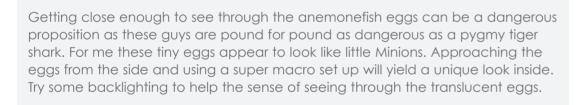
upcurrent. Kicking up any sediment not only hampers your shot but can also damage other jawfish and burrows in their community—don't struggle, and use extreme caution with your fin kicks.



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shooting egg brooding images is that I always learn something new about the targeted subject.

Of course everyone will say, "Wow, what a lucky shot!" when they see your images, but I have noticed that the more I am prepared for the shot, the "luckier" I become. So if you are looking to get lucky on your next trip, prepare for it in advance, as you never know when that chance-of-a-lifetime opportunity will strike.

The best gear for the job is a lens that allows for shooting at a distance, like a prime 100/105mm macro lens. This allows for your subject to relax and behave naturally and will allow you to shoot a more candid photo. Simultaneously while capturing this natural history style image, technical quality must also

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be at its best. Setting the bar high is often the best course of action; close attention to strobe power, angle and proper settings will make or break a chance-of-a-lifetime image, so be ready.

Did you know?

Parenting for marine animals takes specialized skill and strategy that only Mother Nature, herself, could have designed. Unlike humans, the expecting parents of marine animals must deal with extenuating circumstances at all times. In a risky numbers game, the survival rate for individuals is extremely low and the constant threat of survival is always present for the parents and their babies.

Several factors come into play to

Orange finned anemone fish (Amphiprion chrysopterus) tend to their eggs that are normally laid on a rock under or next to their host anemone. Each of the fish that shares this anemone guard and aerate the eggs as a family unit and even the youngest or smallest sibling can be seen fan-ning the eggs. Study their routine for a few moments prior to moving in on the anemone, you will dis-cover that the dominant fish will swim a certain pattern, hesitating for a moment to fan the eggs. These make for great blog or social media post too.

I prepared for shooting the eggs of a Banggai cardinalfish (Pterapogon kauderni) for months. I contacted the resort I intended to work with and had them relay my wishes to their guides prior to my arrival. Once I was there the guide and I began to discuss the images that I wanted to capture when he said he might have something even better! After two consecutive days of diving on one specific coral head we finally identified the target subject. Hours of research and preparing all came down to one brief instance when the cardinal fish quickly turned towards me. Later I was rewarded to see that the fry of the hatched eggs were actually in the Banggai cardinal fishes mouth and was definitely better then what I had planned. This was the first im-age I had ever seen of this type and I still cherish the experience of discovery. Often times contacting the resort ahead of time and relying on your guide can be a crucial part of preparation, teamwork is crucial.





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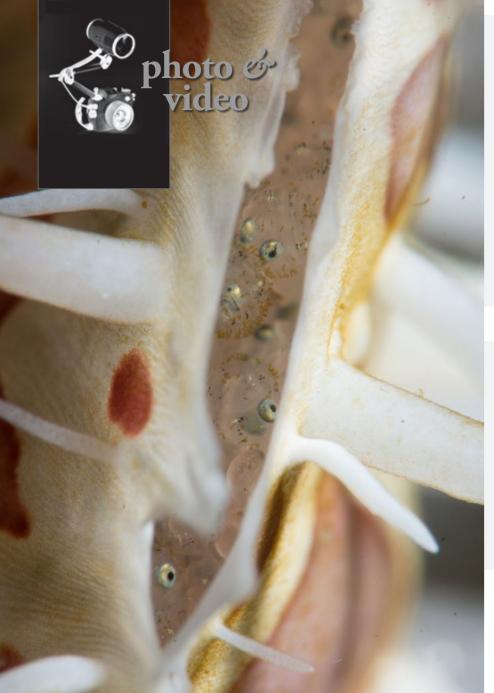
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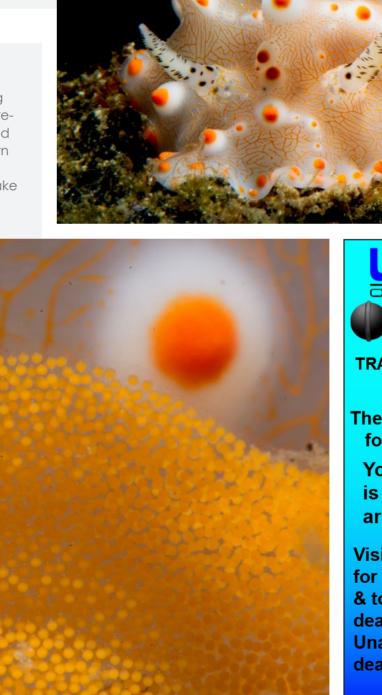
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Ornate ahost pipefish, or Solenostomus paradoxus, females carry the eggs in a specialized pouch under her abdomen. Becoming sexually mature towards the end of their annual lifecycle, the female will court several males at once to ensure successful propagation. The eyes can be seen on these eggs as they are ready to hatch and begin their life. Approach slowly and watch as the pouch opens slightly and closes, as she aerates her eggs. Timing is critical, and using your diopter will again yield a more dramatic image.

Don't shy away from shooting a nudibranch laying eggs as you never know when you will need them. The Halgerda batangas can be found on reefs on almost any dive site in the Indo-Pacific area and are quite common; however, a decent photo of them can be a challenge. The colorful egg ribbons can be just as gaudy as their parent, depending on the species and is an interesting topic unto itself. I used a combination of a longer lens with a snoot for better lighting on this subject.

I shot the same egg ribbon with my super-macro set-up of stacked diopters to get an idea of just how small the eggs really are. This example illustrates yet another way of creating something uncommon from a common find. Planning and preparing is a crucial component in expanding your portfolio and will increase the luck factor dramatically. Take your time, learn all you can and be ready for that chance of a lifetime shot. Remember to be kind to the underwater environment and take care when shooting the images. As tough as these subjects might be in their world, they remain very delicate.





ensure the success of the brood. The most obvious first, the host parents must seek nourishment during the incubation period or risk peril from weakness and starvation. Leaving the defenseless egas alone is never an option, as they provide a tasty source of quick protein for other animals, and therefore, must be protected at all times. Additionally, during the incubation period, the egas must be continuously aerated to ensure the proper flow of fresh water and oxygen, or

the eggs will die.

The answer to getting the shots you want will be as different as the animals themselves, so stay alert and keep your head in the game. ■

Mike Bartick is a widely published underwater photographer and dive writer based in Anilao, Philppines. A small animal expert, he leads groups of photographers into Asia to seek out that special critter. For more information, visit: Saltwaterphoto.com.



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Peacock sea mantis (below), or *Odontodactylus scyllarus*. This complex species of Stamotopods (400 described) are often confused with shrimp as their common name implies. The brooding duties of the sea mantis are often taken care of by the female; however, the male is also known to carry the eggs. In some cases, the female will actually prepare two rounds of eggs and both parents will carry their eggs. The peacock mantis eggs are a dull grey or red when fresh but become bright red when mature and are "clutched" to their chest. The mantis is a long-living creature that can live up to 20 years and will mate and brood up to 25 times throughout their lifecycle. Try shooting the image in a portrait fashion to accommodate the shape of the subject.







It is the male banded pipefish that carries the eggs in this species of pipefish. The developed eggs are bright red and will develop oversized eyes just prior to the release. Waiting and watching the banded pipefish movements will allow you to plan the timing and to position yourself strategically to capture the best possible image.



These super cute lemon gobies (above) have become very popular in the online social macro forums and make for a challenging and lengthy dive. Search coconut shells, dead bivalves or even discarded bottles and be sure to inspect them carefully. The eggs are most likely present, and with a little planned luck and a diopter, you could come away with something special. I like to focus on the intended area for the shot and employ my focus lock technique to keep the lens from hunting at the wrong moment. Hold the position and try to refrain from chasing your subject by letting it come to you.

A squat lobster (top left) is caught releasing its eggs, and as luck would have it, I captured the image. The truth is, my guide called me over, and as I approached to see what the excitement was all about, I nearly swam away. Thinking for a moment, why would this yummy fish snack be sitting on top of the substrate like this, suddenly the subject leaned back putting its claws up and I realized what was happening. I locked focus and fired "at will" hoping for the best. I don't often use the "spray and pray" technique, but this is exactly how it happened. it was over in a three-frame burst, and there was no way to re-create this lucky opportunity.

QUICK TIPS FOR SHOOTING BEHAVIOR

- Use a longer lens.
- Use appropriate strobe power and angle.
- Use a high shutter speed—200 for SLR or 500 for compact.
- Use mid-ranged f-stops (f/14) for best depth of field at 18-24 inches and sharpness.
- Familiarize yourself with your intended subject or behavior.
- Test shoot a photo at the anticipated distance and coloration of your subject, set your exposure accordingly.
- Re-adjust your strobes if your able to get closer then intended.
- Keep a super-macro diopter handy for close-up detailed images when possible.
- Use your focus lock to restrict your lens from hunting at the wrong moment.



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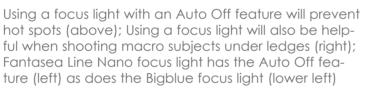
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Using a focus light in underwater photography

Text and underwater photos by Larry Cohen

The focus systems in modern digital cameras have improved greatly in the past few years. In order to work properly, a certain amount of light and contrast on the subject is needed. For these reason, it is a good idea to add a focus light to an underwater kit.

When shooting macro under ledges, a focus light is helpful. It can also double as a dive light during night dives and when diving in an overhead environment.

The most efficient placement is to mount the focus light above the lens port. The beam angle

should be narrow, and unlike lights used for imaging, the focus light does not have to be very bright. Three hundred lumens are bright enough to be used as a focus and dive light, as long as you are close to the subject.

It is important to aim the light to an area with contrast. Many camera systems will not focus on a flat area without detail, even with a focus light. One could use a flat white area such as the bottom of a shark or manta ray, for example. The addition of a red beam or filter will prevent the light from alarming marine life during a night dive.

When creating images in an

overhead environment, at times it is beneficial to use a slow shutter speed. This could cause the focus light beam to appear in the image. To prevent this, many companies, including Fantasea Line and Bigblue, produce focus lights with an Auto Off feature. These lights have a light-sensitive sensor. When the strobes fire, the focus light turns off for a moment. This will prevent the focus light beam from appearing in the image.

Adding a compact focus light with the Auto Off feature will help your camera focus and will not have an ill effect on the image.



Using a focus light without an Auto Off feature can cause a hot spot

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