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## *Shooting Underwater Fluorescence in Daylight Conditions*

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Fluorescence diving has come a long way in the last ten years with more sophisticated torches and filters becoming available. One problem that has always been around is that it “must” be done at night. This alone creates an array of problems. Most divers don’t like diving at night for many reasons: Perhaps they are simply afraid of the dark, they fear some creature will attack them (no more likely than in daylight which is exceedingly rare), they don’t like the reduced visibility, maybe they fear getting lost..... Then there is the issue of actually being able to get out. Some countries/locations don’t even allow diving at night because of a history of lost divers. Egypt (Red Sea) is a prime example. During an international dive trip, a resort may require four or more people to justify taking a boat out at night. If you can’t round up four people to go, you get to pay for the entire boat yourself. It’s also rare even if you CAN get the required minimum, that you will get more than one night dive during an entire trip because of the additional cost levied on a night excursion. For most divers, one night dive per trip is plenty. Of course, there are some locations (very few however) like Bonaire where you can go when and where you like. These locations are great in that respect but “in general” are not the pristine dive locations where the best targets can be found.

This brings us to techniques for shooting fluorescence in daylight conditions. Obviously, this is not going to work on top of a reef at noon, on a sunny day, in 15 feet / 5 meters of water. The creature will indeed fluoresce but the fluo emission will be completely overwhelmed by the ambient light. We at [www.firedivegear.com](http://www.firedivegear.com) have spent many years with thousands of fluo dives logged developing skills and techniques for shooting in daylight. It can be summed up with four simple words:

### ***Shoot in the shadows***

The advantages of daylight shooting are many. No fear of the dark, better viability, easier situational awareness, less chance of getting lost, easier ability to manipulate your gear and settings, and there are creatures that don’t come out at night. Of course, there are creatures that only come out at night as well so this is a tossup. Ideally, you will want to do both day AND night diving if possible.

Examples of this “Shoot in the shadows” are mostly no-brainers. Go out in the early evening just before sundown or early morning just before sunup. These are technically not night dives and usually will not incur an additional resort fee. Often times it can be done as a resort house shore dive. During these periods you will often see many of the day and night creatures at the same time.

During day time operations:

A cloudy day helps.

Look under a coral head for targets.

Look for targets inside a wreck (don’t do a deep penetration if you are not a skilled wreck diver)

Look for creatures on a wall with the sun ***not*** at your back.

Look for holes or ledges on a wall.

Shallow cave entrances are a great location for tube anemones in the sand (see images below).

A bit of depth helps – perhaps 40-45 feet / 15 meters.

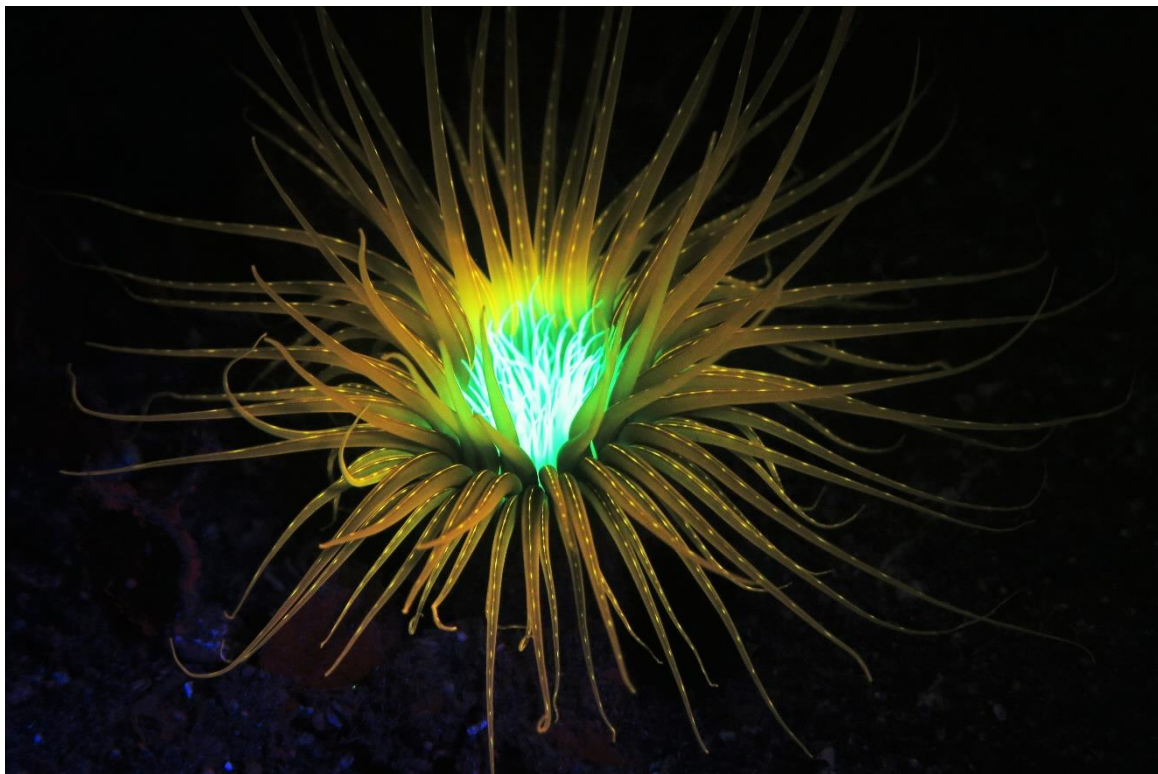
If you are lucky enough to have all of these conditions, you effectively have a night dive for the purposes of fluo work and still have plenty of visibility.

I've even used my dive buddy to cast a shadow in an open area over a target on the bottom. I get all my settings correct, grab his BDC strap and drag him over the target to create a shadow.

At this point in the discussion, I'll bring up lighting. Admittedly, shooting fluo in daylight requires a lot of excitation light – more than at night because the background is not (usually) going to be black. You will need a powerful fluo torch and or filtered strobes. I use both in my shooting because it affords me much greater flexibility but at a minimum, you will need a powerful fluo video light.

The images below are **ALL** examples of daylight shooting. As mentioned above, it is getting so difficult and expensive to do night dives in many locations that daylight ops are the only option. These are but thousands of images I picked randomly to write this paper, they are not even some of the best but they do show what is possible / available in daylight with the proper gear, shadows and techniques.

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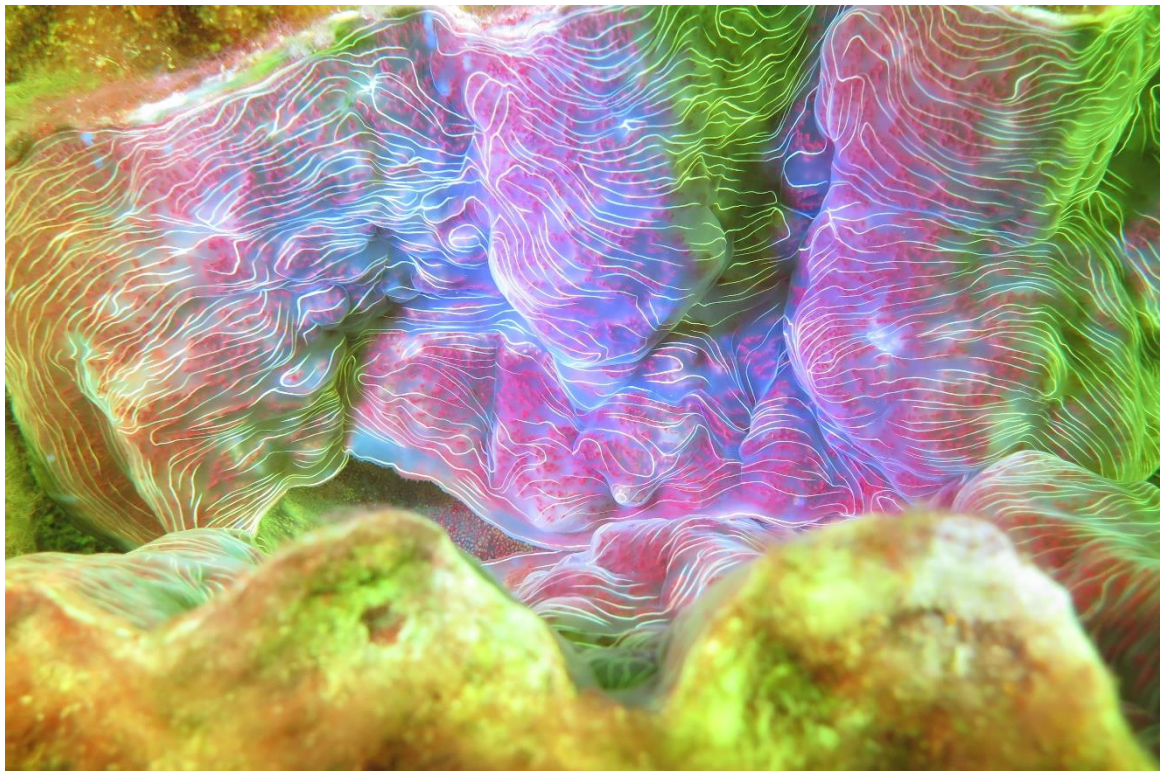


Tube Anemone





Hermit Crab

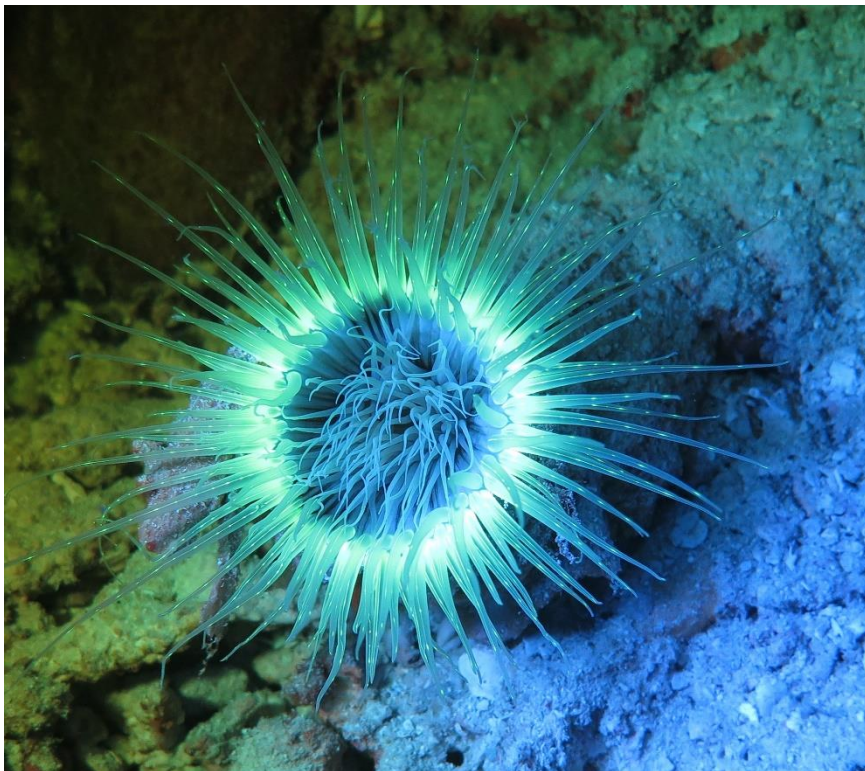


Giant Clam





Scorpion Fish



Tube Anemone





Anemone



Star Coral





Anemone Crab

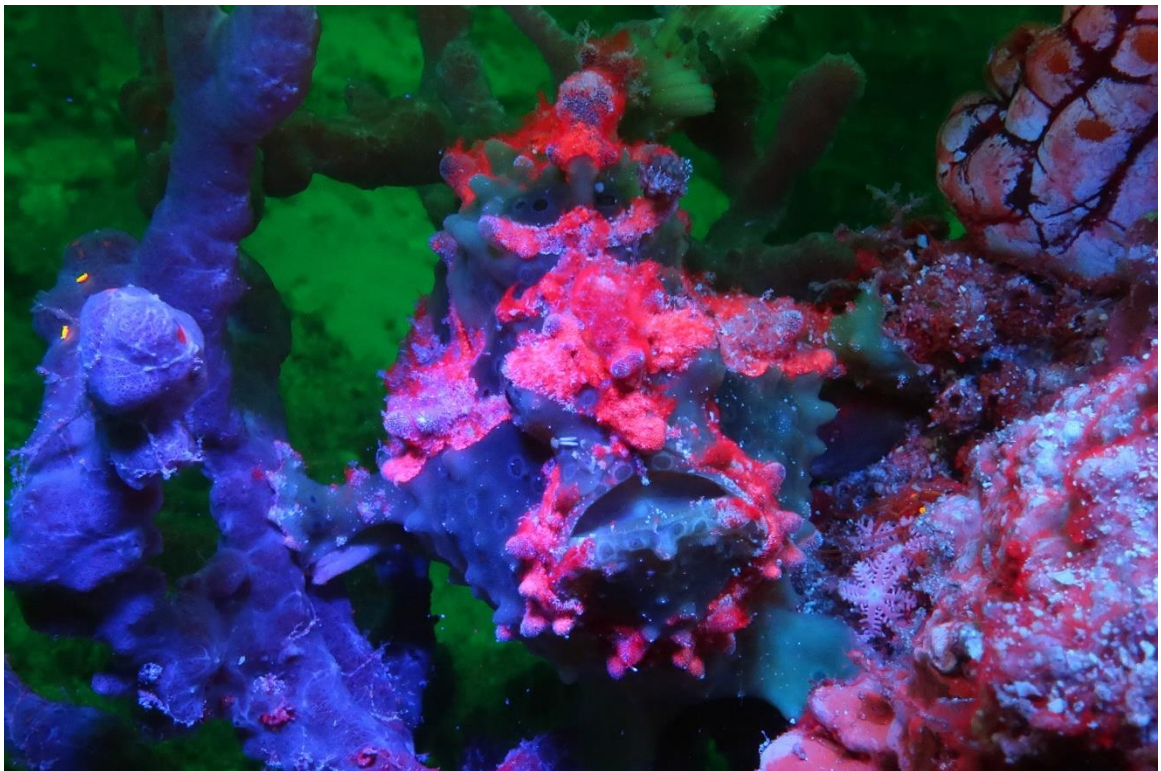


Tube Anemone





Flat Worm



Frog Fish