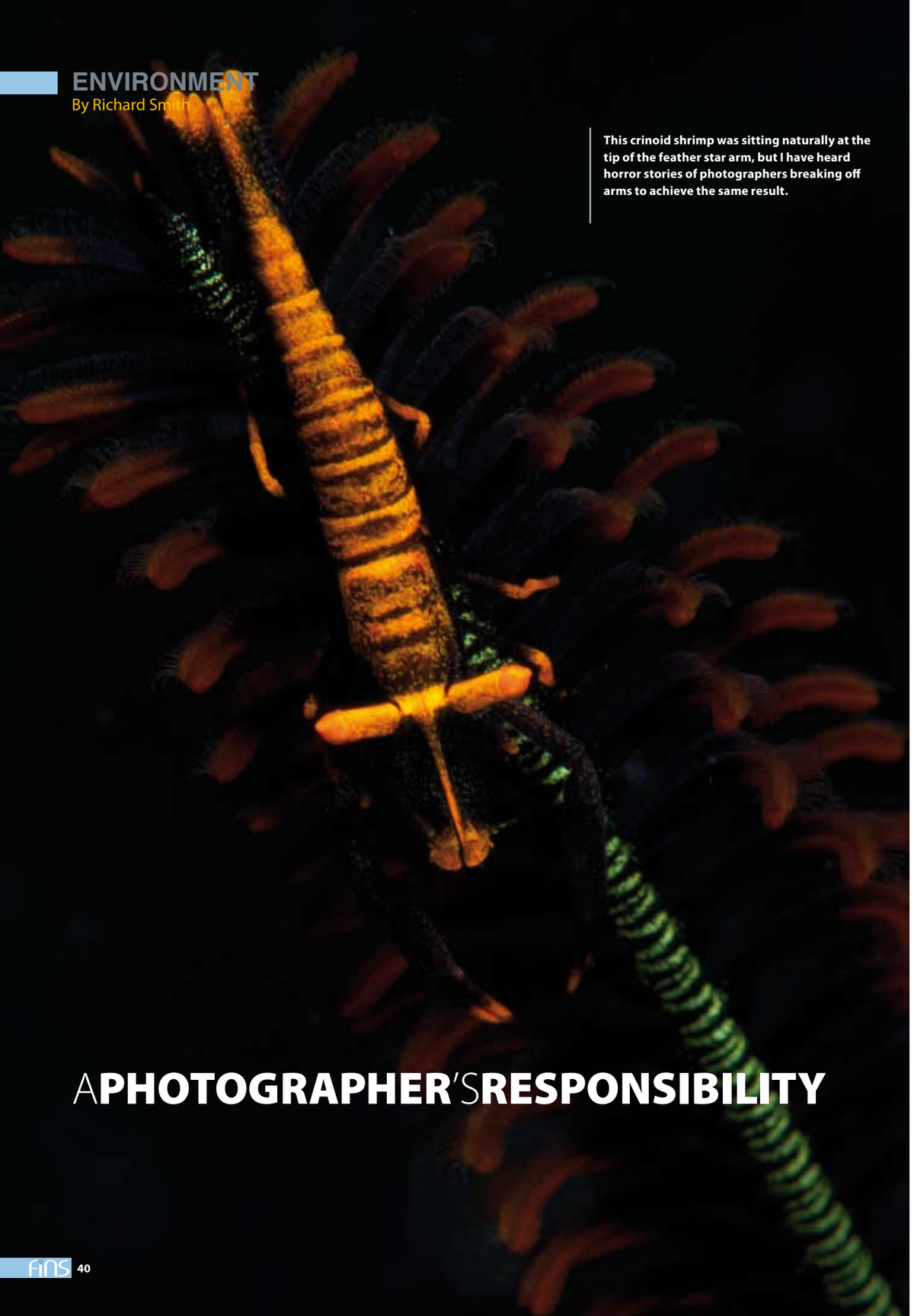
By Richard Smith



This crinoid shrimp was sitting naturally at the tip of the feather star arm, but I have heard horror stories of photographers breaking off arms to achieve the same result.

A PHOTOGRAPHER'S RESPONSIBILITY

Over the last few years, the digital revolution has truly taken hold. MP3 players, mobile phones, flat screen TVs and digital cameras have evolved into easy-to-use and ubiquitous appliances. Obviously it's the explosion of digital cameras that has been of most interest to us divers. It's rare for a group of divers not to have a few compact digital cameras among them. Unfortunately, several studies suggest that divers with cameras are more likely than non-photographers to cause damage to the reef. So how can we prevent, or at least reduce, this damage?

A DROP IN THE OCEAN

Damage to the reef by oblivious, thoughtless or uncompromising divers can be quite a contentious subject which has been known to cause heated debates between buddies or dive guides and their guests. However hard we try not to do so, we all cause some accidental damage from time to time.

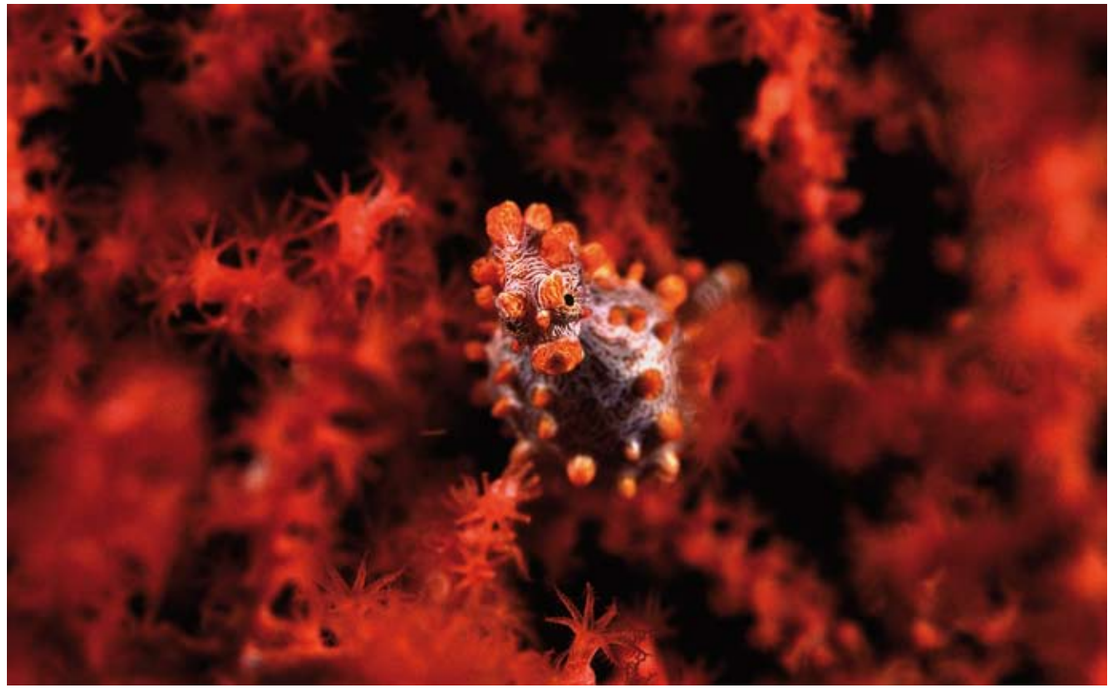
Some view damage done by divers as only a fraction of that caused by dynamite fishing, coastal development and global warming. While these threats obviously need to be addressed, surely divers don't want to compound such stresses on the reef with their own "harmless" activities?

Having dived both in areas with many resorts and in remote locations with less human influence, I've seen first-hand that there's often a clear difference in the health of the reef. Some of this can be attributed to the physical presence of a resort and the associated pressures on the reef, but diver damage undoubtedly plays a role.

It's for this reason that many dive resorts take a hard line on divers damaging reefs. If resorts allow divers to damage local reefs and disturb marine animals, they'll lose resident creatures and won't have top-quality reefs for the next wave of eager divers.

The delicate structure of hard corals can easily be damaged by a misplaced fin, strobe or gauge.

Actively mobile species such as turtles, sharks and large cuttlefish may allow you to approach fairly closely. If you respect their personal space, they're more likely to stick around.



When they feel threatened, pygmy seahorses turn their backs to divers. A slow approach and limiting the number of photographs taken will help them stay at ease.

HARASSMENT OR A HELPING HAND?

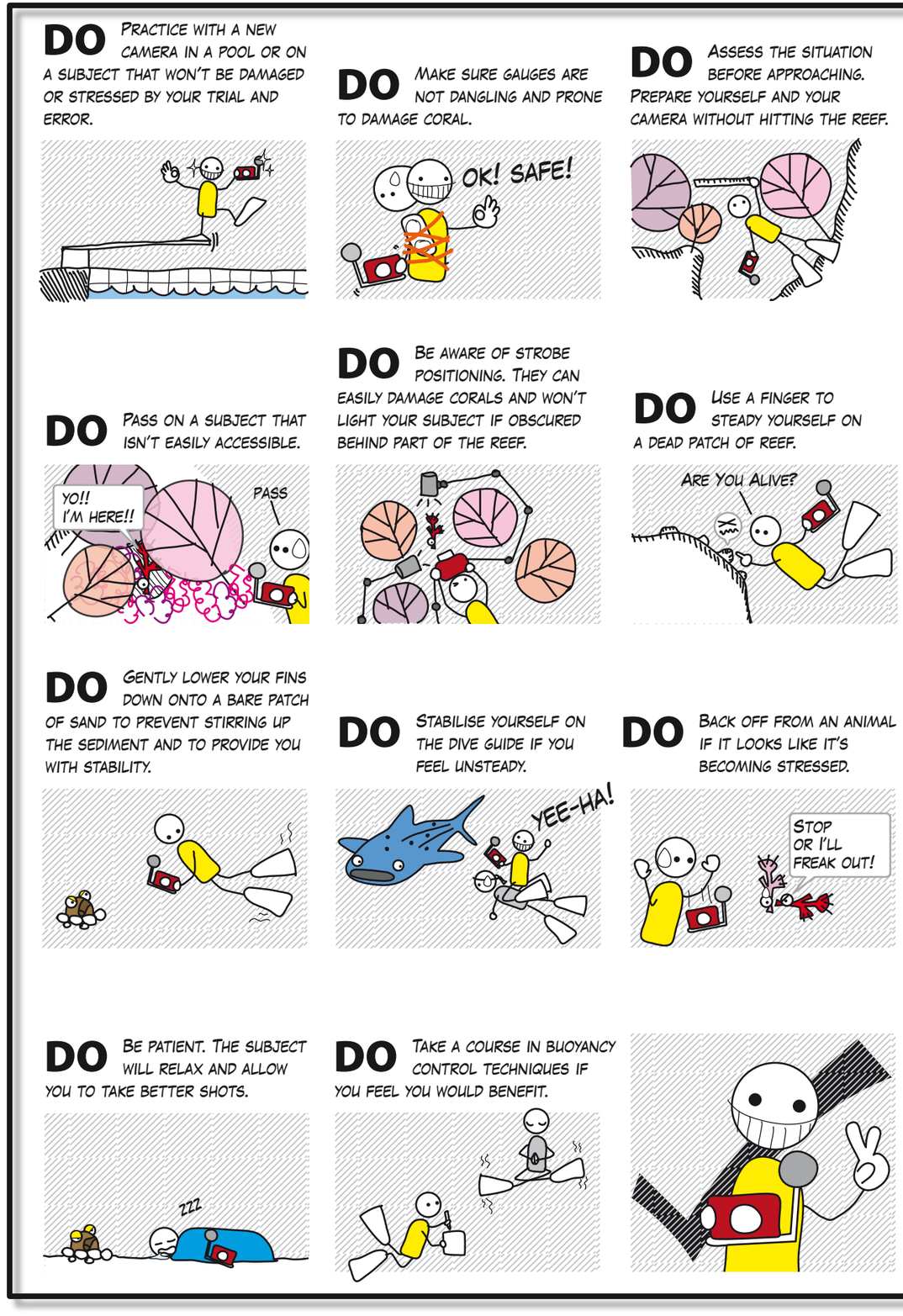
Moving or manoeuvring an animal to get a better shot is yet another issue that divides people. Some believe there's no harm in repositioning critters, while others hold firm that it shouldn't be done under any circumstance.

Perhaps a good way to think of this issue is to consider how you would feel if a massive creature happened along and manoeuvred you involuntarily for an obscure ritual you didn't understand. It'd be pretty terrifying, wouldn't it?

In my opinion, activities that seriously stress an animal (such as inflating a pufferfish) should be avoided. The ethics of moving organisms such as nudibranchs to a "better" background are more open for debate, but I believe doing so detracts from a photo and is usually fairly recognisable. Although at the end of the day, moving a sea cucumber is vastly different from moving a pygmy seahorse.

Firing strobes repeatedly can also stress reef residents. It's difficult to recommend the exact number of shots or strobe proximity each animal can tolerate, since some creatures are more sensitive than others, but as you spend time observing an animal, you should develop a sense of when to back off.

Remember — stressing animals makes them more susceptible to predators and disease, plus they're more likely to move and not be around for the next group of divers to see. The key is to find a balance between getting a nice photo and respecting an animal's space.



All employees and shareholders of FINS have chosen — we abstain from consuming sharkfin.

ROLE OF INSTRUCTORS AND GUIDES

Buoyancy control is one of the most vital attributes of a good underwater photographer. Alas, this fundamental skill is only taught at the novice stage of learning and often never again. It's therefore vital for instructors to ensure that buoyancy control is taught well, and to help divers re-learn this core competency when the need arises.

Also, one study found that mentioning what should and should not be done during dive briefings has little impact on what divers subsequently do. The most effective way to remind divers of their personal role in reef damage is for guides to point out errant behaviour on-the-spot, as it happens.

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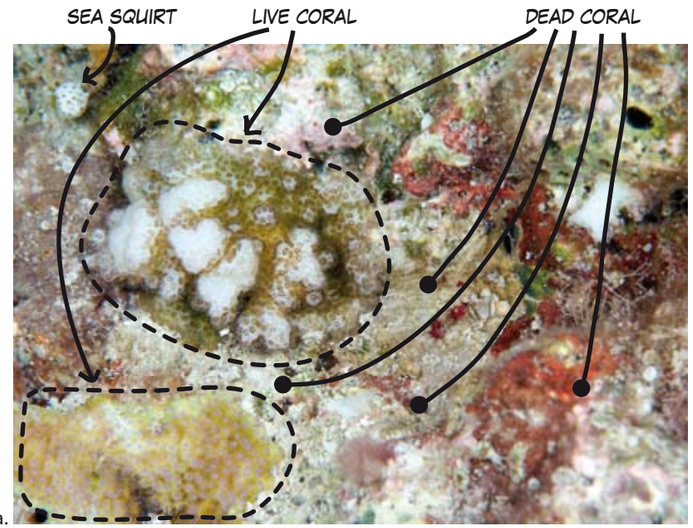
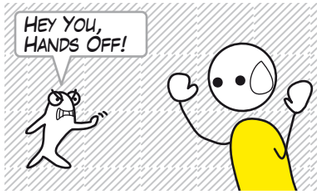


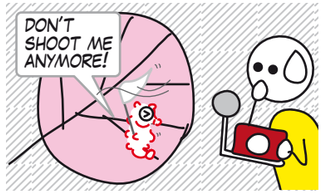
b.

a. New coral colonies grow on the skeletons of dead corals, so pay close attention to where you put your finger.
b. Clark's anemonefish (*Amphiprion clarkii*) fanning their eggs. Animals must be relaxed to perform behaviours such as this.

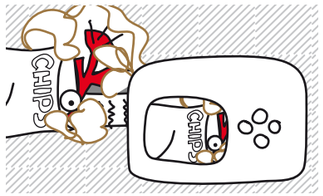
DON'T Touch animals. They will become defensive and not allow you to take good shots. But more importantly, touching animals will stress them out!



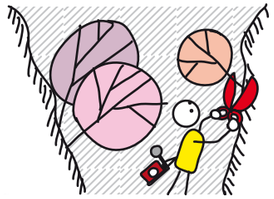
DON'T Take too many shots of each animal. You know how a camera flash from a few metres away can blind you? The same flash can kill pygmy seahorses.



DON'T Take shots you know are going to be immediately trashed when you download them. Save the animals' retinas please.

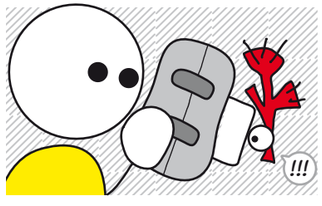


DON'T Move or break corals to get a clear shot.

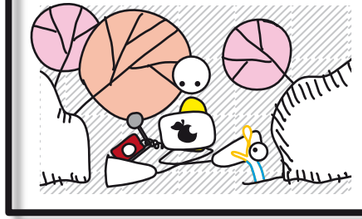


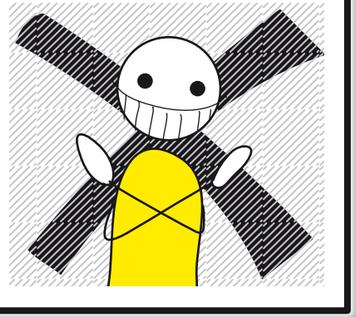
DON'T Use excessively bright focusing lights that will scare the subject away.

DON'T Push the camera really near to get a close-up shot. Your invasion of space will cause your subject to bolt. This is especially true for compact cameras.



DON'T Check your LCD monitor on the back of the camera until you are clear of the reef.





Ribbon eels are a good example of a species that will tolerate photographers to a certain point, but suddenly retract into their holes if they feel threatened.

IN THE END

No one is saying that divers are the sole cause of reef damage, but since there are already so many stresses and pressures on coral reefs, surely we can all take a little extra care, especially since there are literally millions of divers hitting the waters each year.

It's a privilege for us to be able to dive among and observe amazing habitats and species, and minimising our effect on the organisms we encounter will help maintain the ocean's treasures for future generations.

a.

b.

c.

a. A wunderpus hunting for fish beneath its webbed tentacles... a shot which required a slow and considered approach
b. Observing natural behaviours, such as a feeding flamboyant cuttlefish, requires that divers keep their distance.
c. Feeding, mating and fighting are some of the behaviours you might observe if you slow down and take care not to frighten reef residents.