

Carbon Neutral 4 Corals

by Alex Mustard

In May 1998, while photographing in the Maldives, I had my first encounter with coral bleaching. Over the course of just a couple of days all the reef-building corals turned first pastel shades, then bright white. The 1998 event was the biggest bleaching event ever recorded and is estimated to have killed 90% of coral on 16% of the world's reefs (although about 40% of these are now recovering well).

We now know that the primary cause of mass bleaching is increased sea temperature, usually no more than 1-2°C above the long-term average maximum is enough to set it off. Mass coral bleaching is a new phenomenon. First recorded less than 30 years ago, the 1998 event killed many corals more than 1000 years old. It is now clear that global warming is driving the increasing occurrence of bleaching. 11 of the last 12 years rank among the warmest 12 years since records began in 1850. And sadly, like many of us, I have seen many more

bleached reefs since 1998.

Last month, the Intergovernmental Panel on Climate Change - IPCC released its forth assessment report stating it is "very likely that climate change is caused by human activities". Global warming is caused by the greenhouse effect, the result of increased concentrations of greenhouse gases, particularly carbon dioxide, in the atmosphere. The current atmospheric carbon dioxide levels (>380ppm) far exceed the natural range over the last 650000 years (180-300ppm) prior to the Industrial Revolution, and the IPCC conclude the primary source is human burning of fossil fuels. The IPCC report predicts that global average temperatures will rise by between 2°C and 4.5°C by 2100. Coral reef scientists predict that a 1°C rise will cause 80% of reefs globally to bleach.

Global warming is forecast to and is already having major effects on our lives and particularly the natural world. And we contribute to it by a wide variety of human activities that produce carbon dioxide emissions. But here I would like to focus our thoughts on one cause and one effect.

Coral reefs are particularly vulnerable to global warming and as underwater photographers many of us choose to rack up considerable air miles (and carbon dioxide emissions) going to visit them. As Nick Hanna



put it in our book "by traveling to see reefs we are running the risk of loving them to death". Long-haul flights not only produce a lot of emissions, but they also emit the carbon dioxide high in the atmosphere where it has the biggest greenhouse effect.

Visiting coral reefs is something we love to do, and it is not something any of us want to stop doing. One way we can help make this a sustainable activity is by offsetting the carbon emissions from our flights. To make this easy there are now many climate companies (a few are listed at the

end of this article) that will help you calculate the carbon emissions from your flights, and then provide you with ways to invest a comparable amount in re-forestation and in carbon neutral technologies etc. Have a look at their websites for more details.

Obviously this is not a completely perfect solution, it doesn't account for emissions caused by driving to airports, from dive boats or running the air-conditioner etc. Flying to coral reefs is not a major cause of carbon dioxide emissions, but importantly it is something we do



To give you an idea of the figures involved, a one-way flight from London to Singapore produces about 1.2 tonnes of carbon dioxide per passenger, the approximate cost of offsetting this is only about £10.

It is not my intention to start a big campaign (although if someone else does I'd be very supportive). And I can assure you that my life is far from squeaky green. But I do feel that this is an issue that is relevant to our passion and one I hope we can act on at an individual level. Many of us have websites that attract many visitors. Wouldn't it be great if we could post a little note on them to reassure other divers that our air travel for our wildlife photography was not contributing to the demise of the very thing we are traveling to photograph. Maybe it would encourage others to offset their flights too?

Alex Mustard
www.amustard.com

There are many companies that provide carbon offset schemes. Three are linked below, if you are interested in doing something.

www.carbonneutral.com/
www.climatecare.org/
www.sustainabletravelinternational.org/

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Guidelines for contributors

The response to UwP has been nothing short of fantastic. We are looking for interesting, well illustrated articles about underwater photography. We are looking for work from existing names but would also like to discover some of the new talent out there and that could be you! UwP is the perfect publication for you to increase your profile in the underwater photography community.

The type of articles we're looking for fall into five main categories:

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveaboards

Subjects - Anything from whale sharks to nudibranchs in full detail

Equipment reviews - Detailed appraisals of the latest equipment

Personalities - Interviews/features about leading underwater photographers

**If you have an idea for an article,
contact me first before putting pen to paper.**

E mail peter@uwpmag.com

How to submit articles

To keep UwP simple and financially viable, we can only accept submissions by e mail and they need to be done in the following way:

1. The text should be saved as a TEXT file and attached to the e mail

2. Images must be attached to the e mail and they need to be 144dpi

Size - Maximum length 15cm i.e. horizontal pictures would be 15 cm wide and verticals would be 15cm.

File type - Save your image as a JPG file and set the compression to "Medium" quality. This should result in images no larger than about 120k which can be transmitted quickly. If we want larger sizes we will contact you.

3. Captions - **Each and every image MUST have full photographic details** including camera, housing, lens, lighting, film, aperture, shutter speed and exposure mode. These must also be copied and pasted into the body of the e mail.