## PERSPECTIVE By Tony Wu



www.tony-wu.com www.tonywublog.com

Some years ago, I sat down to write one of these columns. I was angry. Actually, "livid" is probably a better description.

At the time, I was in one of the most popular dive destinations in Asia. It was a beautiful day — warm soothing sunlight, gentle tropical breeze, clear blue skies... and of course, the prospect of diving on magnificent reefs that attract divers from every corner of the planet.

As we cruised to the dive site, I noticed a few bits and pieces of trash floating by, spoiling the scenery in the process. Sadly, I had grown accustomed to seeing waste in the water all around the world, and at first, the refuse registered only as an eyesore.

Subconsciously, I probably didn't want to let the unsightly bits and bobs spoil the idyllic mood of the day — sort of like how people look the other way when they encounter a homeless person.

Jumping into the water, however, yanked me rudely and violently out of my false complacency. As far as I could see in all directions...there were plastic bags.

White ones. Black ones. Orange ones. Blue ones. Above me. Below me. To my left. To my right. Coming directly at me, smacking me in the face like an irate homeowner berating a trespasser.

I spent most of the dive collecting plastic bags, surfacing at the end with every pocket of my BCD stuffed to the brim, as well as plastic bags I had collected crammed with more plastic bags.

So it was, filled with spit and vinegar, that I put pen to paper, so to speak, and typed scathing commentary about the evils of plastic.

"Plastics should be banned." I wrote. They're made of polyethylene and/ or polypropylene, essentially long, complex chains of carbon and hydrogen that are strong, flexible and long-lasting perfect for consumer products like bags.

The obvious drawback is that plastic bags take forever to degrade, with common estimates ranging from 400 to 1,000 years, and they can break down into intermediary toxic compounds along the way. Some estimates suggest that 90% of all plastic bags ever made still exist today.

To cut to the chase, plastic bags in the water kill marine life — everything from whales to teeny-tiny microbes.

I never submitted the text though, largely because I couldn't think of or find any rational alternative.

Paper bags? You gotta kill more trees. Cloth bags? Who's going to carry around cloth bags all the time?

Then I heard about plastic bags made from corn, or more accurately, biodegradable cornstarch. "Wow, this is perfect!" I thought, and jumped on that bandwagon faster than a groupie at a rock concert.

Unfortunately, bio-bags aren't perfect either. When thrown in landfills, they undergo anaerobic decomposition, producing methane (can you say global warming?). This stuff costs a lot too, and products are often "diluted" with normal plastic.

Finally, since the bags are produced from crops, more land needs to be cleared, which may lead to reduced natural

To read more about biodegradable plastics:



www.degradable.net

greenery, more artificial fertilisers, fewer crops for food, etc.

On the balance, bio-bags might be better than normal petroleum-based plastics, but the technology clearly wasn't going to change the world.

So it was, yet another column scrapped and back I went to holding my head in my hands.

Most recently in this protracted quest, I've come across a technology that promises yet another possible answer — making non-degradable bags degradable.

It's a simple idea: Incorporate catalysts in petroleum-based plastics to promote oxidative degradation.

Translation: Add stuff to bags that makes them break down into non-harmful products without producing methane or killing more trees.

So is this the answer I've been looking for? To be completely honest, I have no idea.

From what I've read so far, it sounds promising, and I figured it's about time I wrote something about plastic bags after struggling with this issue for so many years.

With 500 billion to a trillion(!) bags consumed each year worldwide, it's a pressing problem, and one that should be of particular concern to divers, since so many of those bags end up in the sea.

As with most issues pertaining to the environment, however, things are rarely if ever straightforward.

If there's one lesson I've learned from pondering plastics, it's that sometimes, the more you learn, the less you seem to know. O