

For more than four decades, not a year has passed without media announcements of dire threats to the coral reef.

Some have been new threats; others, old ones, refurbished or just reiterated. Always, the source is presented by an “expert”.

Over the years we have been told that coral-eating starfish, oil pollution, over fishing, fertilizer runoff, silt, agrichemicals, sewage, anchor damage, people walking on the reef, tropical fish and coral harvesting, ship groundings and global warming were each imminent threats to the reef.

None of these prophecies of doom, however, have become real and the coral reef continues to be a vast and essentially pristine natural region where measurable human effects remain rare or trivial.

Still, unlike the boy who cried “wolf” or Chicken Little who claimed the sky was falling, the coral reef doomsayers never seem to lose credibility.

The big problem for truth and reality in this regard is that the reef is largely inaccessible. It’s underwater and vast. Anyone can claim anything and who’s to know differently? With so many alleged experts asserting there are problems, why should anyone believe us if we disagree? The fact is that they shouldn’t, but nor should they believe any other so-called expert either.

Proper science is based not on authority, but solely on reason and evidence.

History is littered with examples of widely accepted ideas being overturned with new ones that better explain the evidence.

When alleged experts fail to address evidence, try to engage in pissing matches over credentials, or impugn credibility on the basis of affiliation this is not science but simply, politics masquerading as science!

To begin, it is important to understand that the term “expert” is a relative one. The detailed study of reef biology is a recent phenomenon, and scientific understanding of reefs is still very sketchy.

Only a handful of researchers in the world have both the scientific background and the broad experience of reefs necessary to make reasonably informed judgments about conditions on the reef, and whether those conditions are due to natural variability or human causes.

Almost all the so-called experts given credence by the media are office workers with academic credentials but very limited direct experience of reefs.

Their claims often amount to hypothetical explanations for very limited observations that, more often than not, describe entirely natural conditions, or are based on computer models that predict imaginary futures. The aquarium industry in Fiji is the Fisheries second largest export. Collectively the five companies operating earn between 30 – 40 million in export dollars and employ close to 500 people.

In most cases those that earn their living in this industry live in remote areas where there is little chance of gainful employment.

The revenue generated by this industry also contributes approximately 57% of the total export to the major airline carriers ... mostly on Air Pacific.

The saltwater aquarium hobby started in the late 1960's. In the beginning it was only possible to keep fish due to lack of the current technology we enjoy today.

In about 1989 technology finally caught up with the hobby and it now became possible to have a thriving coral reef in your home or office.

The passion that most hobbyists share inspires them to learn more about the coral reef and they have become the reefs biggest advocate to protect it. What we have learned over the years has also been shared with science since it has only been the past 60 years or so that we have been able to make regular visits to this aquatic world through the use of scuba.

The use of live rock is often misunderstood by those that do not understand the basic laws of reef ecology. Live rock has the ability to absorb harmful ammonia and nitrate that would otherwise spell disaster for the reef inhabitants.

Over the last several years there have been a total of 10 papers written on live rock and over twenty papers on coral harvest.

Live rock should be carefully collected on the reef tidal flats where the wave action and loose rubble render this product as a renewable resource. There should be a large enough area available to utilize the method of site rotation and only one operator utilizing that particular site to ensure a sustainable harvest. The abundance of live coral on the reefs is another misunderstood subject.

It has been reported that our industry is very selective and is only interested in about .001% (or 1 piece per 10,000) of a given resource. The collection site we utilize in our export is about 9000 square kilometers and we rarely see the same spot twice.

In comparison Forestry accepts the figure of 3% to maintain a sustainable harvest. 3% vs .001% do the math!

The aquarium offers great opportunities in education and awareness and I doubt there is a single marine biologist that was not first inspired by and beautiful marine aquarium. This is the true sense of the hobby sharing with science what we are all learning together at a rapid rate.

Another example of the hobby sharing its knowledge is the idea of coral farming.

Back in about 1998 I first heard of some hobbyist starting to grow some of the coral we collected by simply snapping off a small piece of the larger corals in their tank and gluing it to another location or sharing this fragment with another hobbyist.

This gave way to my dream to experiment with the idea of coral farming on a commercial scale. Although it was a lot of trial and error in the beginning we now have over 40,000 pieces of coral growing on various sites.

Fiji leads the way in this new and exciting field and I have been asked to help train other countries who also export marine products. This includes Bali, Indonesia, India, Belize, Mauritius, Seychelles, Gabon and of course Tonga.

Another aspect of our industry is it appears to be recession proof. In our present economic situation this should be an important factor to remember as we have had no layoffs at WSI.

About 7 or 8 years ago the Fiji government, in conjunction with the World Wildlife Foundation and our industry, hired a reef scientist who actually worked on the reefs and did the job.

There was considerable concern over our harvest and the Fiji government simply did not know enough about it. Although they knew that they wanted to shut us down they had no proof that we were actually doing any harm.

It was the opinion of the Ministry (at the time) that if a well-known reef scientist wrote a report condemning our industry that they could use this report as a tool to put a stop to our industry.

The report took several months to compile all the information, and do the surveys. The industry in Fiji remained transparent and offered the scientist complete access to our records and dive sites and accompanied all of the operations on many dives.

When the report was finally submitted it clearly showed that our trade and collection posed no threat to the environment and added to the local economy.

As a result, the Fiji government decided to discredit the report and buried it at the bottom of a pile of reports never to be referenced or used again.

The report titled "Statement on Fiji Harvest Report" (which appears on my web site" was written by Ed Lovell who did a considerable part of the work on Charlie Veron's well know book "Corals of Australia and the Indo-Pacific".

Both Charlie and Ed are "experts" who are the exception to the rule (among others such as Walter Starki, Andy Bruckner, and Bruce Carlson to name just a few) that I was talking about who actually get in the water and do the work.

Fiji has over 72 genera with over 342 species. Our industry collects only 26 out of the 72 genera. Another clear example took place in Fiji in the year 2000.

Fiji had a major bleaching event.

Over 90% of the east side of the main island and most of the tourist locations in the west lost their reef to bleaching. The experts blamed everything from the French testing nuclear warfare in Tahiti to Global warming.

They said our reefs would be lost for many generations to come and may never recover. It was horrible doom and gloom in the papers and in reports that circled the globe.

Of course our industry didn't stand a chance against this kind of publicity.

Today, 5 years later, all of those same reefs that were documented as totally dead are now back to better than 90% full recovery. The "experts" were wrong.

However, they did manage to scare off about 30% - 40% of the tourist for the next couple of years, when the Fiji economy relies on tourism for 85% of its revenue and almost shut down our industry worth about 40,000,000 annually. Luckily, my reefs were largely not affected but my competitor is shipping corals from those very dead reefs today and the studies show a very sustainable harvest well within the ecology of the reef.

Ecology, like economics, is holistic by nature, and not all effects are immediate or obvious. A balanced, sustainable use of a resource makes possible a healthy human

ecology. Unnecessary restrictions on a particular resource only put more pressure on others and it is entirely possible that habitat destruction could occur.

Beyond the misuse of a valuable resource, the false claims of threats to the coral reef also entail a broader and an even more important problem; the misuse of science itself. Modern environmentalism has become much more than simply a concern for a healthy environment. It has developed into a peculiar quasi-religious blend of new age nature worship, science, leftwing political activism, and anti-profit economics.

No reasonable person will ever deny that our exploding population, advanced technology and massive consumption have an environmental effect, but, equally undeniable, humans are a part of the ecology of this planet. Everything we do or do not do has its effects and these may often be remote and unforeseen. Nature is not perfect, but always in a state of flux. Human actions can improve and enlighten one to the beauty of nature, as well as degrade the abundance, diversity and conditions of life. When looking at the problems we are facing today we must be realistic and observant of natural causes. When some problems turn out to be not real, or less bad than feared, this must be acknowledged and investigated, not denied or denigrated.

There is no shortage of real problems. We have no need to manufacture imaginary ones.

Finally, the responsibility lies with you to share what you have learned from this wonderful hobby and to foster a better appreciation of life within the sea. The knowledge we have learned in this hobby has already bridged many links into science as we all move forward together with a better understanding of such things as growth rates, temperature fluctuations, natural settlement and compatibility to name just a few.

We are essentially on a new horizon and truth, not hysteria, has never been more important for the future of our relationship with nature.

Fiji has the unique position to be on the forefront of this developing science and become world leaders in this exciting niche market.

So I say to you,

Our hobby has the unique ability to share and learn from some of the most hidden (until now) secrets of nature. As we look forward we should all be proud of our accomplishments to foster and encourage a balanced and loving stewardship of our planet for the benefit of our generations to come

The above was a presentation given by Walt Smith at a MACNA and IMAC conference in 2006 – 2007. I thank Mr. Walter Starki for the permission to use some of his text in this document.