

***Challenges and opportunities for Pacific Islands within the  
Marine Aquarium Industry***

By: Walt Smith

Opportunities exist for Fiji and other small developing Island countries to participate in the advanced marine aquarium markets around the world. This situation presents benefits for all parties involved, at a minimum, measurable impact on the collection sites.

For exporting countries and their citizens the aquarium industry provides substantial currency and more than substance jobs as well as the utilization of airfreight and related services that would otherwise go mostly unused.

Unfortunately, there are those who are ready to rally against allowing any individual to keep marine life; some of them would even shut down public aquariums and zoos. Their rationale is that all wild things belong in the wild and that “perceived” destruction of habitat is taking place in order to provide specimens for public display and private collections.

But I put to you, what would be the real cost of our lack of exposure to marine organisms? Only in this century, with the advent of scuba, underwater photography and viable marine aquariums has the human race had any true notion of what life is really like under the surface of the sea. By experiencing the living world of the reef first hand, or better still, by controlling a miniature version of this world, we actually gain awareness of the magnificent diversity and beauty of part of the world that was hidden from our ancestors.

Aquariums can and do serve to parallel our own lives. In the end we keep aquariums because we are human. Our argument is that “it is worth it” to become much more aware of the living world. Exposure to the living world fosters appreciation and care taking. For those who rally against the careful and miniature collection of these specimens consider these truths: humans only love what they know; and people do not destroy what they love. Those who discover the tremendous rewards of successfully maintaining and experiencing the living world invariably develop a profound respect for the complexity and worth of marine ecosystems. Make no mistake that we fully realize that these are some of the most threatened environments on earth. A growing population of conscientious marine aquarist could be a powerful ally in finding ways to ensure their survival. Providing an economic rationale for keeping coral reefs alive, productive and able to provide a source of livelihood for third world families without harming the reef is no idle promise. As responsible collectors we can do it – indeed we are already doing it.

In all of the recent studies that focused on our industry it has been pointed out that careful and systematic collection of aquarium fish, live coral and live rock has

left minute negative impact on the environment. It also pointed out that we provided far better than average income for those who lived in remote areas where there is little chance of gainful employment.

The challenge we must face as responsible exporters is to educate our collectors to respect the resource. Sustainable harvest is a reality when you consider the extensive geographical areas available for collection. However, it is not enough to just know that our activities are sustainable, we must instill in them our everyday creed that they have a "responsibility to respect the resource" and to be selective and conscientious while collecting.

The country can benefit in many ways from an industry such as this if basic environmental guidelines are strictly followed. Using our two companies as a small example, our Tonga Company employs 30+ people and extended families and in Fiji we employ over 200 local people and extended families. In export dollars, comparing the overall dry weight of aquarium fish and coral to that of chilled fish it is over 100 times more valuable with only miniscule depletion of the resource. I have witnessed villages that we work with build schools, churches and community centers while turning on their lights and flushing a toilet for the first time. All of this has been made possible with income earned from our industry.

In the Pacific islands we have become a major player in this industry mainly due to the diligent efforts of the few operators here not to follow the bad habits learned and practiced by many companies in Indonesia and the Philippines. Even though these countries are making an effort to "clean up their act" their damaged reputation has already had an effect on the market. The reputation of the "drug free" product from the South Pacific islands is becoming the new buzzword among the demanding, sophisticated buyers within the industry today. While the conscientious and increasingly sophisticated end-user continues to insist on sustainably collected marine organisms the exporters in the South Pacific have an opportunity to maximize their potential in this market.

Just this year our industry has seen the formation of the "Marine Aquarium Council". This is a global non-profit organization based in Hawaii whose goal is to bring a certification standard to our industry worldwide. Through the certification process exporters and wholesalers around the world will need to demonstrate sustainable practices while collecting and successful husbandry and shipping technique. Once certification has been achieved it is our hope that governing bodies in exporting and receiving countries will only allow these companies to participate in the market. At this time the end user is being made aware of the formation of "MAC" and has demonstrated a desire to only purchase certified products that have been harvested in a sustainable way.

Another very important aspect that is beginning to spawn in this industry is the evolution of marine aquaculture. It was not too long ago that the cultivation and rearing of giant clams was conceived to supply the demanding Sushi market of Japan and Asia. It was ultimately discovered that the clams grew too slow to be a financially viable enterprise. As companies and governments in Palau, The Solomon Islands, Tonga, Micronesia, and all over the Pacific Region began their culture of these animals it was only the aquarium industry that came to their rescue with cash to buy the product that no one else was interested in.

We now have established viable clam farms all over the region that regularly supplies our industry.

For the first time in the late 1980's marine aquarist were able to spawn and raise a limited variety of marine aquarium fish. It was not too long ago that this was considered impossible and we now have a growing industry supplying over 30 varieties to our trade. Although there are no operations in the South Pacific at this time, the technology is available to pursue these types of projects in the future.

Along these lines, some pioneering work in French Polynesia over the past few years has had some very exciting and interesting results. The researcher involved was able to collect, identify and raise post larval fish harvested in specially designed nets placed on the reefs edge. The marine fish aquarium industry is eagerly awaiting the development of these projects to supply the trade with many different varieties of tank raised healthy specimens. To my knowledge there are now two operations of this type in the region and in the years to come, if developed, we could see this source replace up to 20%-30% of the current market in wild caught marine specimens. I strongly urge involvement in projects such as this throughout the region and our company is currently taking steps to move in this direction with the construction of our new "land based" aquaculture facility in Lautoka this coming year.

However, one of the most exciting developments within our industry comes directly from the hobby itself. For the past ten years with the development of advanced lighting, filtration and superior quality live rock individual aquarist have been able to fragment and grow live coral in their home aquariums. In a clear example of our hobby initiating demand and sharing with the scientific community results we now have several "coral farms" in the South Pacific region. Up till now these efforts have been self funded by the exporter involved and have only been limited by available cash. My associate in the Solomon Islands and our own farm here in Fiji have had amazing results over the past few years growing many different species of both hard and soft coral that comes up to market size within 8 months to a

year. Much can be learned from this enterprise as we continue to gather data and share our results with science. Huge potential exist for developing countries to become involved in setting up and training locals to grow and harvest their own coral, clams and fish. Projects such as the restocking of damaged areas can also be finally considered viable and profitable.

In my view our industry has a great deal of knowledge and experience to offer the future generations of reef scientist and ecologist. We must continue to pursue the unknown in order to expand our knowledge of preserving the living world beneath the sea. Working together towards the new millenium is the first step in creating sustainable and profitable ways to benefit the people and governments within this region.

In closing I would like to say to all of you who have visited with me through concern or curiosity or have been to one of the worlds many public aquariums or even better, have had the privilege to experience this wonderful hobby first hand.

“May your brush with captive marine life enhance your appreciation of the living world, inspire you to share your experience with others, and foster stewardship of our planet”.

Thank You,  
Walt Smith

\* Some excerpts from Bob Fenner's book "The Conscientious Marine Aquarist" used with permission.