

**Visit to the Marine Aquarium Council of North America
Annual Meeting in Dallas, Texas, September 28-30th, 2012.**



**Sponsored by Western Sustainable Agriculture Research
and Education Program.**

Submitted by Simon Ellis, October 2012

Introduction

This field visit was part of the plan of work on a project titled “Training in Marine Ornamental Farming for Extension Professionals in Micronesia” which was awarded to the Marine and Environmental Research Institute of Pohnpei in 2011. Purpose of the visit was to study market trends: in marine invertebrate livestock, especially cultured specimens; aquarium lighting and filtration technology; and marine aquarium trends in general.

Over 2000 visitors attended the tradeshow and talks during the 3 days event.



Attendees waiting to enter the tradeshow



MACNA Tradeshow Floor Scene

Marine Invertebrate Trends

Corals

There were many vendors selling aquacultured coral fragments as well as wild collected stock at the tradeshow. Of particular interest are the Australian wild collected large polyp stonies (LPS) corals. These dominated the show and are having a significant impact on the market for aquacultured corals, mainly because of their diverse colors. There were also significant numbers of wild collected *Euphyllia spp.* Small polyp stony corals (SPS) were not as popular but there were many species on show. These corals are harder to keep, especially the *Acropora*'s.

Retail pricing varied from \$20 per fragment to several hundred dollars depending on the rarity of the coral. The main competition to aquacultured corals coming from the Micronesia region is the wild collected Australian corals and also, US-based firms. The cost of freight from the Micronesia region into the US is also a hindrance.



Assorted coral fragments for sale



Assorted coral fragments for sale



Typical "frag tank" used to display corals for sale



Frag tank with mainly SPS stony corals under blue actinic lighting, note pricing \$120-150 per piece



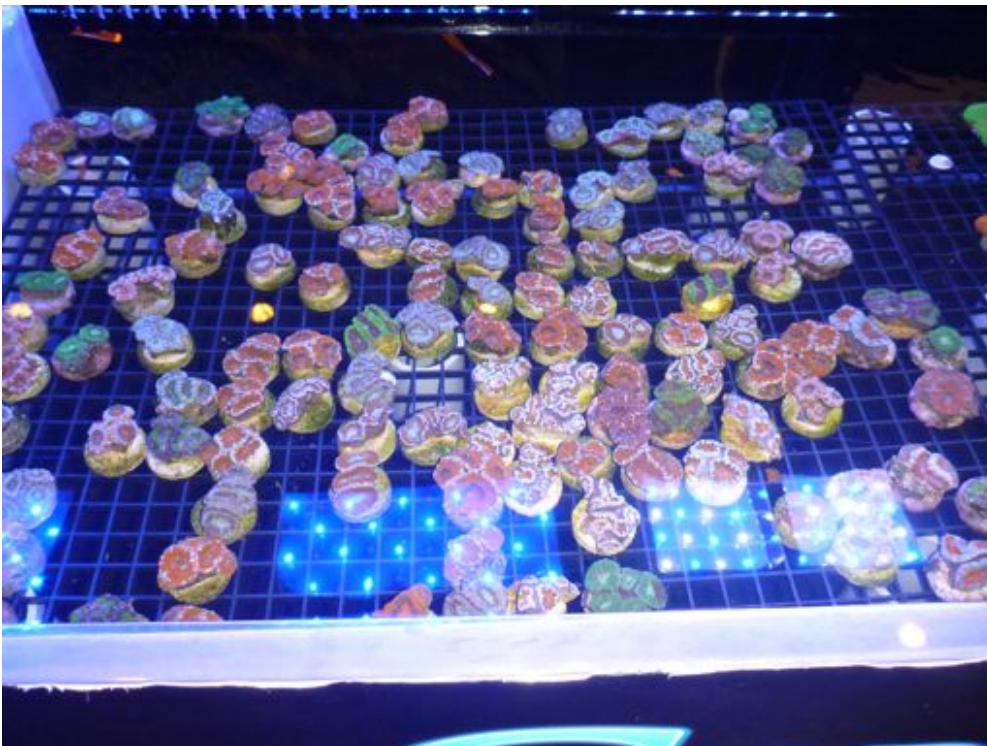
*Tank displaying aquacultured corals and wild collected *T. crocea*.*



Coral display selling cheaper fragments



Australian wild collected LPS corals which are extremely popular



Wild collected LPS fragments



Aquacultured photosynthetic gorgonians



Colorful Plerogyra and Euphyllia colonies.



Tank with mixed variety of corals



Display tank for Ocean Reefs and Aquariums (ORA) who have a mariculture facility in Majuro, RMI



Another ORA display tank

Zooanthids and Corallimorphs

Because these animals are easy to fragment, many people were selling a wide variety of colors. Often fragments of just one single polyp for corallimorphs and 3-4 polyps for zooanthids were being sold.

Giant Clams

Most of the clams on display were either wild collected *T. crocea* from Vietnam and, more recently, colorful *T. maxima* from French Polynesia. Some farmed *T. derasa* from Marshall Islands were also available. The influx of large *T. maxima* from French Polynesia represents something of a threat to the market for farmed clams from Micronesia but at present only clams great than 5" can be exported. Many people still prefer smaller clams. There are also reports of the larger clams from French Polynesia being weaker. The demand for small colorful *T. maxima* remains strong.



Wild collected T. maxima from French Polynesia

Lighting and Filtration Trends

LED lighting

Light-emitting diode or LED lighting is becoming increasingly popular for marine aquarium hobbyists. The technology is changing so fast that new lights are constantly being produced. Whether this lighting can be effective for growing all corals, in comparison to metal halide and T5 compact fluorescent lighting is still under debate. LED lighting brings many advantages, namely much lower power usage and lower heat production.

Protein skimmers

There were many companies at the tradeshow selling various types of new protein skimmers. Overall, however it seems the technology has not greatly changed. These filters remain a critical component of reef tank keeping.

Overall Marine Aquarium Hobbyist Trends

Due to improved lighting and filtration there has been a move toward smaller, more compact tanks. Traditionally, saltwater tanks had to be larger than 50 gallons to be successful but many reef tank keepers now successfully keep smaller tanks of 2-30 gallons in size. While this allows people to enter the hobby a little more cheaply than in the past it also means that people are buying smaller fish and corals to stock the tanks. Many of the coral fragments begin sold were quite small.

There are also reports of a general decrease in interest in the hobby. Marine tropical fish imports, an indicator of growth in the business are reported to have declined about 25% since the beginning of the economic downturn in the US in 2008. There is no real indication of whether this is a longer term trend or that demand will increase again once the US economy improves.