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## Editorial

by G. Christopher Buerner

Some things about the Fish Business never change, while others seem to change daily. Recently I found a copy of a Quality Marine Fish Catalog dated January 1988. Nearly 20 years old, the catalogue reflected the price of fish sold through Quality Marine in those days, the range of species available, the supply lines we counted on for our best quality, the range of hard-goods we offered the trade.

It was interesting to reflect on what had changed, and at the same time how much hadn't. In the catalogue is a page highlighting certain aspects of our then state-of-the-art facility, the various services we provided the retailer, and the company's mission statement. Some of the obvious changes are the expanded variety of wild-collected fishes available from an increased number of supply lines, the changes we've made to our holding facilities through continuous development and expansion, the process by which we take orders from our customers, and the increased range of hard goods we now offer. One of the most notable changes was the increased variety of cultured corals and fishes available today from 20 years ago. Clearly a positive trend, the increase though significant and notable, is not what it should have been. Back then I would have predicted a much broader variety of aqua-cultured ornamental marine species available in the year 2007. The most dramatic change? In our 1988 catalog we listed exactly 30 types of available coral, both hard and soft, and probably a decent assortment for the time. Today? We probably sell 30 different species of the genus acropora, and a quick count shows we have species available from more than 80 different coral genera.

What hadn't changed was our mission statement, which was "to offer the best quality specimens, unparalleled variety, as well as qualified information about the care and keeping of marine fish and invertebrates". The exact verbiage may have changed, but we've stuck to our roots and continue to offer the quality, variety and service that made us the industry leader 20 years ago. Also the same were the sources from which we received our best fish, our suggested acclimation procedures, quarantine, husbandry and holding protocols. By 1988 Quality Marine had been in business nearly 10 years, so many lessons were learned in that time and practices refined. Also the same were many of the key manufacturers of dry-goods whose products we distributed then and now, and still represent many of the leading products in this industry, among them, Tropic Marin Synthetic salt, and various products from TMC. Eerily similar were the prices of some fish. With the dramatic increases in freight, fuel, costs of living both domestically and abroad in collecting countries, I was surprised to see that Damsels were sold for one dollar wholesale then, and not much more now. It's not as if the collection, holding, packing or transport processes have been revolutionized in the past 20 years to make handling that animal so much more efficient. To the contrary, Damsels are more expensive than ever to harvest, pack and import. Petroleum products such as bags, Styrofoam, rubber-bands and airfreight have skyrocketed. It seems everyone still has it in their minds that a damsel should only cost \$1.00, even though a dollar is worth half as much now what it was then. An interesting change? Back in the 80's we sold purple tangs for \$125.00 wholesale, and yellow tangs for \$3.50. Those are two fish now whose margins are at the narrowest margin ever. Lately, Yellow tangs are selling in the neighborhood of \$16.00 wholesale and we've seen Purple tangs for as little as \$19.00.

What's clearly still the same are the few key species whose beauty, ease of care, and modest cost keep new hobbyists joining the ranks of the marine fish-keepers. I haven't had an aquarium to take care of personally in the past few years so I've decided to set up a new tank in my office, and when I do, I'll probably add a bit of live rock first, a handful of Green chromis, and then, maybe a tiny little Yellow tang. I don't think I've kept a Yellow tang since 1988, and although they're not exactly rare these days, they're getting harder and harder to come by... Who knows maybe in 20 years, they'll be worth \$125.00.

# Calendar of Events

## Conservation Corner

### The Role of Mariculture in Today's Aquarium Industry by Kevin Gaines

There have been many advances in ornamental mariculture in recent years, including the successful rearing of pygmy angels such as *Centropyge loriculus*, Flame Angel, *C. resplendens*, Resplendent Angel and *C. interruptus*, Japanese Pygmy Angel to name a few. It was only five years ago that these species were thought to be too difficult due to their long larval phase and specific dietary requirements. Although these successes have raised the bar for new species development, the production of such species is far from being commercialized.

Mariculture plays a vital role in helping to supply the aquarium industry with an alternative to "wild caught" fish and invertebrates. On the other hand, the limited species diversification and higher costs associated with maricultured products further dictate the need for the sustainable harvest of "wild caught" organisms. The Marine Aquarium Council (MAC) certification is one way to ensure that you are buying an organism that was collected in a sustainable manner. Without the balance of "wild caught" and maricultured products, the hobby would be dramatically impacted. Hobbyists should demand to know the source of their new aquatic pets and should choose maricultured or MAC certified organisms whenever possible.

The continuing trend of new fish, coral and clam farms around the globe is a strong indication that the viability of ornamental mariculture is now a permanent part of our industry. The low cost of lagoon and open ocean flow-through systems in tropical third world countries creates both a sustainable supply of products and income for the local people. Species selection for aquarium suitability is improving and more and more items are becoming available all the time. Hobbyists, retailers, wholesalers, collectors and farmers all play a vital role in helping our industry operate in a sustainable manner, while conserving the natural coral reef habitat. With all the negative global environmental impacts, we have a responsibility to improve the way we live and help to preserve our world.



#### MACNA XIX: Marine Aquarium Conference of North America

Sept. 14-16  
Pittsburgh, PA  
[www.macna2007.com](http://www.macna2007.com)



#### Superzoo The National Pet Show for Retailers

September 18-20,  
2007 Mandalay Bay  
Convention Center,  
Las Vegas, Nevada  
[www.superzoo.org](http://www.superzoo.org)

#### H.H. Backer Associates Inc.

#### Backer's 41st Annual Pet Industry Trade- Show and Educa- tional Conference

October 12-14, 2007  
Donald E. Stephens  
Convention Center,  
Rosemont, Illinois  
[www.hhbacker.com](http://www.hhbacker.com)

## Species Spotlight:

### Ricordea

#### Scientific name:

*Ricordea florida* (Watzl, 1922)  
*Ricordea yuma*

#### Common name:

No commonly accepted name

Class: Anthozoa  
Order: Corallimorpharia  
Family: Ricordeidae  
Genus: *Ricordea*



A blue colormorph *Ricordea florida*

## Description:

Ricordea are in the Corallimorpharia order, being related to the Discosoma, Rhodactis, Actinodiscus, and several other mushroom genus's. These soft corals are very popular due to their vibrant and varied color types. They are relatively slow growing corals that are far less territorially invasive compared to most other mushroom species. As such they make great additions to reef aquariums with soft and stony coral species. Ricordea are classified as having two species: Ricordea florida and Ricordea yuma. Ricordea florida are found in Caribbean waters while Ricordea yuma are found in the tropical pacific. The two corals are best distinguished by observing the characteristics of the mouth. Ricordea florida has a smooth area of tissue beyond the radial spirocysts (bubbles) that extend to the mouth, while Ricordea yuma has spirocysts that extend centrally towards the near edges of the mouth. Additionally, the full adult size of the florida is normally smaller than their indo pacific relative. Both species have their own distinct colors and patterns although Ricordea yuma is known to have a wider variety of color patterns.

## Natural Habitat:

Both species are found in varied locations and are not highly specific in habitat requirements. They are collected primarily on rock structure and found in almost all areas of shallow and medium depth reefs. Established areas are commonly blanketed with this coral making a very nice colorful mat. Many of the more colorful Ricordea yuma are collected in deeper water were there is much less visible light.

## Aquarium Suitability:

Ricordea are a good choice for beginner aquarists as the husbandry requirements are fairly basic. In general the genus is very hardy, with most problems stemming from poor collection. Ricordea yuma are very often imported with cuts around their feet, due to collectors trying to ship them with as little rock as possible. While Ricordea is not CITES restricted, collectors must not have any substrate attached to the Ricordea that exceeds 3 cm in diameter(CITES Conf. 11-10) . If the coral gets cut it becomes more susceptible to bacterial infections which are known to melt Ricordea overnight. Due to the typically shorter transportation times and the fact that most are tank raised, Ricordea florida have an easier time in shipping than the Yuma's, which take an average of 40 hours of shipping time from point of export to import. We advise aquarists and businesses to be cautious if presented with the opportunity to purchase anything other than a very small rock less than 3 cm in diameter with no more than one or two tightly packed Ricordea florida. Anything larger may be illegal as the rock on which the Ricordea is harvested is classified as Scleractinia and is CITES II restricted, meaning that the collector needs a CITES certificate in order to collect the rock. Collection of any rock from the ocean, classified as Scleractinia, in the waters of the United States or its territories is illegal. It is in these waters where the majority of the more colorful Ricordea florida is found. We recommend that aquarists be wary of vendors carrying wild collected Ricordea on larger rocks, as it is very likely that the corals were collected illegally.

## Acclimation/Placement:

Ricordea are medium to highly aggressive, stinging most other corals that they may come in contact with. Although due to their slow growth and lack of aggression Ricordea are easily contained in a reef tank with other sensitive species. Ricordea are primarily photosynthetic deriving most of their nutrition through light as they contain small symbiotic algae called zooxanthellae. Ricordea also occasionally feed on Artemia and Mysis shrimp as well as other small zooplankton-like foods. They have a limited prey capture response, meaning they don't react quickly to food that falls or gets caught on them. If they do not capture offered foods, it should not be of concern to the aquarist. Both species of Ricordea thrive in high light (metal halide/T5/PC/VHO) environments but will also tolerate fairly low light, albeit with less vivid coloration and slower growth. It is always best to slowly acclimate Ricordea to higher light levels, especially the yuma species. Good water quality is also a must as small changes can quickly lead to their demise. These corals require low to medium current and stable temperatures between 76F-82F.

## Propagation:

Natural propagation is a very easy way to propagate Ricordea although it may take a long time to occur. The two means by which they reproduce are pedal laceration and fission. In pedal laceration, the mushroom gradually moves to one side, leaving small pieces of its basal attachment behind that develop into baby mushrooms. In fission, the mushroom divides itself into two or more pieces.

Both species of Ricordea are very easy to manually propagate. The most common tools needed are a clean plastic cutting board, a clean hand towel and clean SHARP blade like a razorblade, scalpel, or a very fine pair of scissors. One of the



Using a clean razor blade dissect the foot of the coral.



Be sure to also score the substrate to facilitate a clean break.

most important things when propagating coral is that your hands are clean (without using soap) and that you handle the coral as little as possible. By keeping hands and equipment clean, the chances of infecting the coral with some sort of bacteria are less likely.

Before propagation, swirl the coral around while it's still in the aquarium so that the Ricordea expels as much water out of it as possible. Place the coral face up on the cutting board and using a sharp blade cut down through the center of the foot into equal halves. If possible, we recommend that if the coral is on a rock at the time of propagation, the rock should also be cut or cracked in the same place that the coral is cut. If the rock is not cut, the Ricordea halves will often fuse back together to become one again. In good water quality Ricordea recover and heal very fast with full recovery within a couple of weeks. If good care is exercised through the propagation process and only healthy specimens are used, the Ricordea fragments will recover almost 100% of the time.



Pliers or bone cutters may be used to break apart the substrate.



R. yuma one week after propagation

After being cut, the Ricordea should be placed in an area of low flow and low light with medium sized rubble substrate. In a matter of days, the freshly cut coral, if already unattached from rock, will re-attach itself to the substrate. This rubble may then be glued or placed in the desired location for the coral. When applying any glue or adhesive to the rubble, be careful that it does not come in contact with the highly sensitive tissue of the coral. Such interactions are known to often cause bacterial infections which can damage or even kill the coral.

Another technique used by aquarists to create smaller Ricordea is to make a small slice on the side of the foot of the mushroom. In the right conditions these little pieces of the foot of the mushroom will soon evolve and morph into baby Ricordea.

#### References:

Trade in Stony Corals. Convention on International Trade in Endangered Species of Wild Fauna and Flora: Conf. 11.10 (Rev. CoP12). Retrieved July 18, 2007 from <http://www.cites.org/eng/res/11/11-10.shtml>

## Featured Product

### Gamma Blister Packs

Quality Marine is excited to introduce the new Gamma food blister packs. These very attractive and artistically designed packs use the same quality food as the traditional Gamma packs which are used at Quality Marine to feed our fish and invertebrates. Made from 100% natural products, Gamma foods offer the highest quality ingredients available. Blister packs are also a quick and convenient way of feeding fish as each pack is designed to dispense one measured cube of food at a time, leaving the rest of the product sealed within their separate blisters.

These foods are rapidly packed, sealed and then frozen to preserve freshness. Once packed they are gamma irradiated, a process where the packs are blasted with high energy gamma rays which are known to kill bacteria and parasites on contact. This process completely eliminates any risk of introducing harmful parasites or bacteria into your aquarium, and also means that the food is completely safe to store in your freezer.

## gamma blister



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