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Spring 2013 Edition

The Sea Star Quarterly



*The Sea Star Quarterly
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wasatch
marine
aquarium
society



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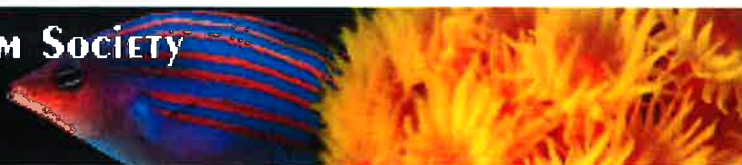
Spring is Here!

As we dust the snow from our shoes, and shake the chill from our bones, that can only mean one thing... Spring is just around the corner! In this edition of the *SeaStar Quarterly* we anxiously await the longer, sunnier days, the cool, crisp nights, and the opportunity to do some long - needed spring cleaning of our aquariums.

Spring traditionally is a strong time in the North American reef aquarium hobby, as it is easier for suppliers to ship livestock without the risk of exposure to the bitter cold. This enables your LFS to order in a larger quantity of fish and corals, and in turn offer you better pricing. It is also a time when manufactures introduce new or updated equipment lines or equipment.

Here at WMAS, spring is a time to celebrate some great Club Events like Fragstock and the Annual WMAS Reef Tour! And we start off the spring fun with our Annual Banquet (this year in March).

We hope you enjoy the ride with us as we preview all the great things to come here at WMAS in 2013 – so climb aboard... and let's go!!!



Species Profile: TRIDACNA DERESA

by Jeremy Wootton

The Southern Giant Clam, more commonly known in the hobby as the Deresa clam, can grow as large as 24" long in the wild. In captivity, they typically grow less than 12 inches - although some hobbyists have had them grow larger than that.

Several things distinguish the Deresa clam from other clam species. One of the more notable features is a small opening on the bottom of the smooth shell. Deresa clams also have the 6 to 7 vertical folds in the shell. Their shell has the ability to close all the way. And, unlike most other giant clams, the Deresa shell has a smooth, layered exterior.

Deresa clams come from coastal reefs throughout the tropical Pacific Ocean as well as the Coral Sea. Until recently, all clams were wild – caught and shipped to the US for sale. With the advent of a successful commercial breeding and propagation program, nowadays many of the Deresa clams you see in stores are aquacultured. Common color varieties include gold, brown, orange, and yellow. Deresa Clams often have brilliant colors on the edge of the mantle.



Species Profile: TRIDACNA DERESA

(cont)

Deresa Clam Care:

Deresa clams prefer to be located on the sandbed or within the recesses of the aquarium rocks. They do not attach as firmly as other species of clams, but you still need to take care when moving them to avoid damaging their byssal gland (commonly known as the 'foot'). All giant clams get nutrients 2 ways: photosynthesis that occurs via symbiotic algae within their mantle tissue; and filter feeding through their gills. All clams and related mollusks, such as oysters and mussels, will benefit from feeding phytoplankton or something similar to Two Little Fishies *Marine Snow* product.

The best way to introduce a stony clam to your aquarium is to treat them similar to hard/stony corals. Do not introduce them to a newly established aquarium, just as you wouldn't want to do so with SPS.



Slow acclimation, via a drip line, and start out the clam out on the bottom of the tank. The Deresa is the probably the hardiest of all Tridacna clam species. Over time, with the right lighting and supplemental feedings they can double, if not triple, in size inside your aquarium.

Clams are considered 'reef safe' but the aquarist needs to be wary that some fish and inverts that might pick at the clams tasty mantle. If you're still not sure

whether or not your aquarium is a suitable environment for a giant clam, just ask your friends at here WMAS – we can help you figure it out!



WMAS Find – A – Word

Try and locate all the hidden Reefkeeping terms listed under the Search Key below. Remember, the hidden words can be found on the horizontal, vertical, diagonal... even backwards!

I	E	I	K	Z	I	A	T	I	W	I	F	S	C	T	D	T	T	E	C
O	U	A	C	L	O	W	N	F	I	S	H	S	K	H	I	E	S	A	T
L	A	R	O	C	L	A	M	H	M	T	F	A	E	I	A	E	A	O	T
E	L	I	T	E	U	Q	N	A	B	E	W	L	F	T	M	F	T	M	R
A	C	H	S	T	N	H	I	T	C	H	H	I	K	E	R	M	X	U	A
O	G	S	G	A	R	F	O	U	H	E	C	N	A	G	E	L	E	A	M
I	P	I	A	T	T	W	L	M	S	I	H	I	P	M	M	R	N	R	U
T	I	N	R	M	F	P	A	P	N	S	D	T	M	O	N	T	I	R	O
F	C	R	F	E	W	M	I	A	A	R	A	Y	E	A	T	H	A	M	H
I	T	T	T	T	H	T	K	A	T	D	L	X	T	C	H	M	T	A	A

Aiptasia
Elegance
Mermaid
Skimmer
Zoanthid

Banquet
FragS
Monti
TOTM

Clam
FragStock
POTM
Utah

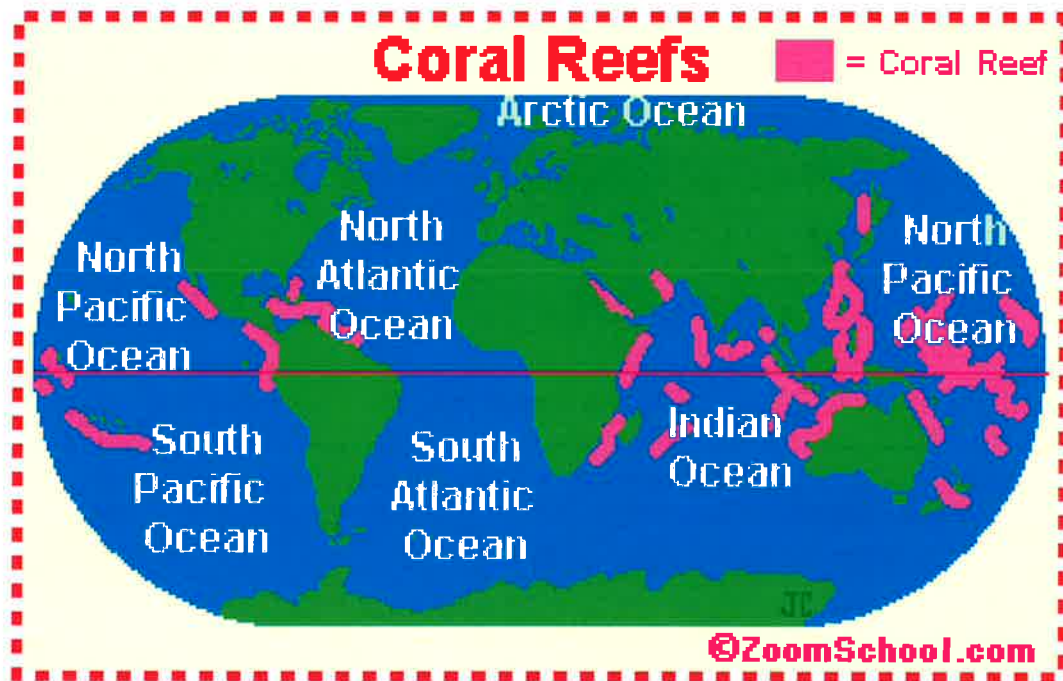
Clownfish
HitchHiker
Reef
WMAS

Coral
LFS
Salinity
Xenia



Did You Know?

Although coral reefs cover less than 1% of the Earth's surface, over 25% of all marine fish species find their homes in coral reefs. These marine species include oysters, sea urchins, sea anemones, jellyfish, crabs, shrimp, sponges, lobsters, octopus, clams, sea turtles and mollusks.



Pacific coral reefs contain more species of fishes, plants and corals than Caribbean coral reefs do.

And about 10 million bacteria live on one square centimeter of coral.



Saving Coral Reefs from Climate Change

by Bob Carlson

The United States, China, Brazil and other super powers don't seem likely to make the industrial and cultural changes necessary to stop the effects of climate change.

So, scientists have come up with some ideas on how to protect coral reefs from the symptoms of warmer and more acidic waters caused by global warming.

"A much broader approach to marine management and mitigation options, including shade cloth, electrical current and genetic engineering must be seriously considered," wrote Ove Hoegh-Guldberg of Queensland University, Greg Rau from the University of California, and Elizabeth McLeod of The Nature Conservancy in the journal *Nature Climate Change*. "The magnitude and rapidity of these changes is likely to surpass the ability of numerous marine species to adapt and survive."

Four Ideas to Save the Coral Reefs:

Underwater Umbrellas: Shade cloths, like those used in agriculture, could protect corals from the ferocious intensity of the sun. The technique has already been tested, and could be used to protect particularly sensitive areas or maintain refuges. Shading itself is not a strategy that can be used across hundreds of kilometers of the reef, but it might - at a local level - be able to influence how many corals die.

Shock Treatment: Running an electric current through metallic structures causes limestone to build up on the metal. Corals and other marine species then latch onto this limestone and create new habitat. The technique is currently being used to replenish reefs in Indonesia that had been devastated by cyanide fishing, rising water temperatures, and coral collectors.



Saving Coral Reefs from Climate Change

(cont)

Neutralize Acidic Waters: The study also suggested adding silicates and other chemically basic substances to the water. The basic materials would help to neutralize the increasing acidity of the ocean's waters. The increased acidity, largely caused by carbon dioxide absorbed by sea water, makes it harder for marine organisms to build shells and reefs with calcium compounds, since they dissolve in acidic solution.

Breeding and Engineering: Corals could also be selectively bred to withstand increased temperatures and acidity, contend the oceanographers. Just as crops can be bred to withstand droughts and higher temperatures, the hardiest corals could be selected and bred for later release into the wild. For even faster results, the corals could be genetically engineered, but releasing genetically engineered organisms into the wild is a highly controversial idea.



The Barbaric Practice of Shark Finning

by Faith Emrazian

Some of us have heard about this topic and some have not. I'm writing this to those of you who have been uninformed about the hottest topic I've been writing in my English class for the last year: Shark Finning. I'd like to get us all up to speed with the facts.

The process of shark finning is thus, a shark is caught (via net or hook) and is taken on board a ship or onto the beach and is promptly de-finned by way of a knife or machete. Dorsal, pectoral and sometimes caudal fins are removed, and still live animal is rolled back into the water - where it will die of loss of blood or being attacked by other predators. Sharks cannot swim without their fins and no, they can't grow them back.

So, why would anyone do this? The main reason for shark finning is to use the fins to make soup. Yes, shark fins are also used in traditional Asian (mostly Chinese) medicines; but most shark fins end up being served up in soups at Asian wedding dinners and business luncheons



The Barbaric Practice of Shark Finning

(cont)

Having shark fin soup at your wedding is considered a sign of wealth and prosperity. Shark fin soup is considered a mandatory part of the wedding tradition in some Asian cultures.

How did this barbaric tradition start? Some say it started in China during the Ming Dynasty (1368–1644) AD; while others say during the Sung Dynasty (968 AD). The Emperor would serve exotic dishes to dignitaries and the like to impress his visitors. What is more impressive to your guest than to be served up a part of the fiercest creature to ever stalk the ocean?

But here's the problem now as I've understood it to be. China's middle class has grown financially. A lot. Now I'm a smart girl, and I know that when more money comes into the house I'd like to replace a few "old" items with something more modern/exotic, longer lasting or more desirable to look at when friends come over. I'll ditch the Kraft American cheese and summer sausage and drive to Pirate O's in Draper for Italian meats and cheeses. Likewise, the Chinese people feel the same when it comes to their friends/families and business associates.

Now I'm not saying we should all jump in the ocean and hug a shark in protest. Jaws is not my bestie by any stretch of the imagination. But I've done enough research to know that it's unacceptable to me, as an American, to have this going on without saying anything about it.



I mean,
is this...

worth THIS?



Upcoming Events – Spring 2013

- **March** - Annual Winter Banquet (yes, we know this is the “Spring” Upcoming Events... the Banquet was moved from its usual date in February to March to accommodate our 2013 Banquet Guest, Hannah Mermaid) Join us on March 7th for a fantastic catered dinner, and meet the lovely and talented Miss Hannah!



- **April** - It's Fragstock Time! Fragstock is our annual coral and livestock sale featuring the best local vendors and fish stores, along with a few out of state surprises! Join us on Thursday, April 4th for the best deals of the season!



- **May** - The Annual WMAS Reef Tour will be on Saturday, May 4th This “Parade Of Homes” style Tour will feature dozens of Club Members Reef tanks. A GREAT way to get ideas and advice for your tank! And our **BONUS** May 2nd Club meeting will feature the one & only “Mr.Saltwatertank.com”: Mark Callahan!!!



The Return of the MWRF

You asked for it – and it's back!!!

The Mountain West Reef Fest, or MWRF, will be coming back to Salt Lake City on Saturday, November 2nd, 2013. So, what's the MWRF, you ask?

The MWRF is a full day Marine & Reefkeeping Conference & Trade Show. It is an educational symposium where people can attend lectures and presentations from industry leaders, conservationists, authors, and scientists. It is also a trade show where hobbyists can buy the hottest new corals, rare and exotic fish and see new cutting edge equipment from literally *dozens and dozens* of vendors. Attendees can also give their feedback to manufacturers so they can continue to bring us the innovations we are looking for. There will be fun events like an Aquascaping Contest where attendees can vote for their favorite display. And there will also be a HUGE raffle; with hundreds of prizes – some worth *thousands* of dollars! And lastly, the MWRF is a social event. Many of the speakers, vendors, and hobbyists come to socialize with each other. The MWRF gives people an opportunity to put faces with names they might see on National hobby sites like *Reefcentral* or *Reef2Reef*, *Reefbuilders* or even friends you know from a local hobby message board like the WMAS Board.

For a look at past MWRF Conferences, just scroll down to the **Mountain West Reef Fest Forum** on the WMAS Message Board.

Tickets will be going on sale soon; so keep checking the WMAS Message Board Forums for details. I can promise you that the 2013 Mountain West Reef Fest will be the biggest and best one yet!

- Bob

