Marine Aquarium Society of the Carolinas

MASC Newsletter I - Q3 2004

First Annual MASC Meeting a Rousing Success

By Keith Stiles

Highlights:

Much careful planning for the first annual MASC meeting culminated in a rousingly successful event. The meeting, held August 28th at the NC State Veterinary School, exceeded all expectations with 65 members and non-members spending an eventful day at educational talks, frag demonstrations, frag trading, information sharing, and old-fashioned purchasing. Two vendors, Reefscience and Aquatica were on site offering dry goods and corals to those looking for that special something for their tanks. Attendees purchased raffle tickets for drawings for a number of really nice gifts including a Beckett driven skimmer made by Brian Ferguson (Fergy) donated by Reefscience.com and a metal halide pendant donated by Drs. Foster and Smith. The raffle raised approximately $350 which benefits the club and covers our operating budget. Many thanks to all who purchased tickets!

Meeting attendees watch as Wade Lehman gives demonstrations on coral 'fragging'.

Two useful and informative presentations were made during the course of the day. During the morning session, Wade Lehmann gave a presentation entitled "Toxicity in the Marine Aquarium" that focused on the various toxins that can be found in the marine aquarium including things aquarists need to be aware of in keeping certain marine corals, fish, and invertebrates. During the afternoon session, Richard Harker gave a presentation entitled "Views from Oceans from Around the World" that focused on beautiful photos of coral reefs around the world. Richard illustrated how natural reefs function and how we should try to emulate the regions from which corals originate with the vivid images he displayed.

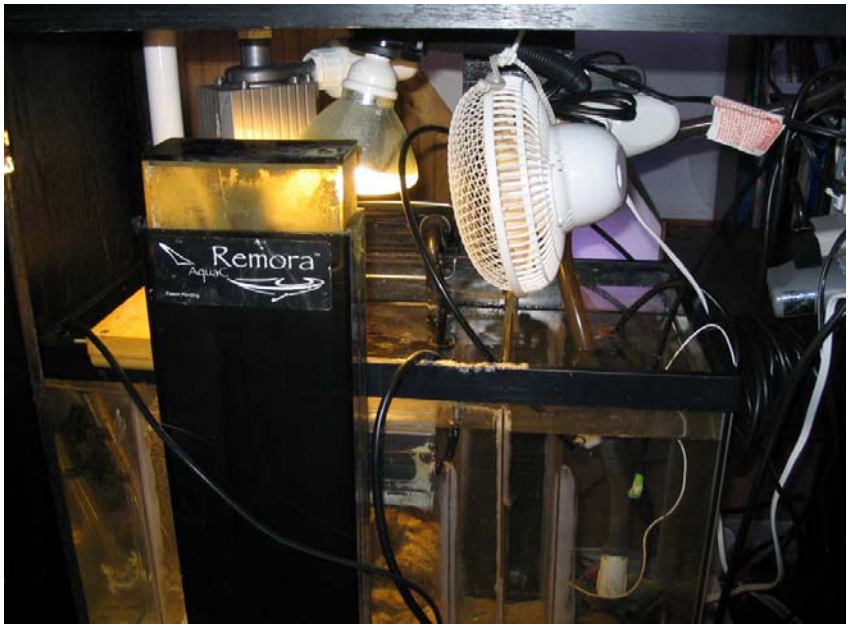
The meeting finished with a demonstration by Wade Lehmann of how to successfully fragment SPS, LPS and soft corals. All MASC members received a frag from their choice of coral to take with them as they left the meeting.

This meeting was a success in yet one other important measure. During the course of the day, nineteen new members joined our organization bringing our membership rolls to a total of 63. Congratulations to all who made our first meeting such a great success.

Tank of the Quarter—Wes Johnson's 58 Gallon SPS Tank

In each newsletter (delivered quarterly until we develop a much more active organization), we will feature a member Tank of the Quarter. These tanks will not necessarily all be what we would think of as "show tanks." Rather, we will be featuring tanks in various levels of development to illustrate how a tank develops as it matures over time. That said, our tank of the quarter is Wes Johnson's 58-gallon SPS tank.

When initially approached about featuring his tank as our tank of the quarter, Wes stated that the tank was still growing in, and needed some more growth to develop more fully. However, you can see in the photos that his tank is developing nicely and has been well planned. This 58-gallon reef-ready SPS tank has a 20-gallon sump featuring a Mag 12 closed loop with a 1-inch Sea Swirl. An Aqua C Remora skimmer does the necessary job of taking care of filtering the water of excess proteins and nutrients. Instead of dosing with kalkwasser, Wes installed a Fergy calcium reactor which he insists is an investment well worth the price. Lighting for this tank is provided by one 250-watt 10K Metal Halide light powered by an electronic ballast, and a second 175-watt 20K XM metal halide light on a magnetic ballast. Natural filtration is taken care of by the 60 pounds of Haiti live rock and the 50 pounds of live sand composing a one to two inch sand bed.



Top: Full tank shot of Wes Johnson's 58 gallon SPS tank.
Above: Shot of the underside of the tank, showing the Remora skimmer and 20 gallon sump.

Tank of the Quarter—Cont.

The tank has a very impressive clean-up crew composed of 25 Astrea snails, one black brittle star, 15 Cerith snails, 20 Nassarius snails, 20 Nerite snails, a Tiger Tail cuke, and 4 Turbo snails. Further scavenging is accomplished by the two Scarlet Cleaner shrimp and a Peppermint shrimp. The invertebrate population is rounded out by a blue dot Squamosa clam, a Crocea clam, and a gold teardrop Maxima clam.

Above: Flame Angelfish
Below: Green Cap
Bottom: Blue Nana

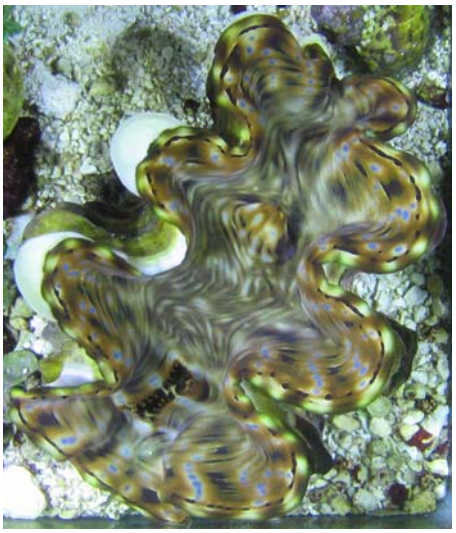
Fish comprise a relatively minor portion of the tank's inhabitants: a firefish, two green Chromis, a royal gramma, and a true Percula clownfish. Representing slightly larger fish are a flame angelfish and a yellow tang.

This tank is dedicated almost entirely to SPS corals with only three LPS corals represented (Cynarina, hammer, and trumpet corals). SPS corals are well-represented by a large variety of Acropora species representing the rainbow with blues, purples, and greens. Additionally, Capricornus are well represented with green, orange, and purple varieties residing in the tank. Pocillopora, and M. digitata are also well-represented.

An interesting note about this tank is the large number of corals accumulated by trading frags, yet one more reason for joining an organization like MASC. An entire list of the corals is too long for this article. Rather than list every SPS coral included in this tank, I would encourage all of you to visit Wes's website at:

http://www.kicbak.com/

Drop him an e-mail to congratulate him on his beautiful tank!



Blue Dot Squamosa Clam

Crocea Clam

Gold Teardrop Maxima Clam

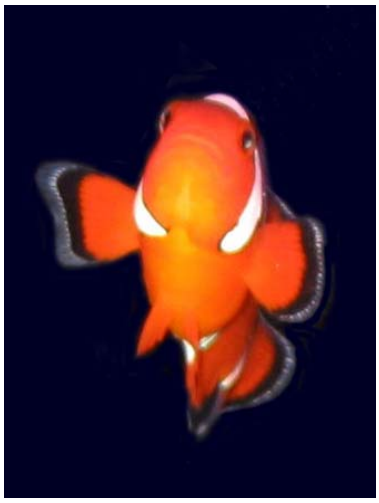
Spotlight Species

Amphiprion percula, The True Percula Clownfish

By Scott Thomas

The percula clownfish, or Anemonefish, has to be, without a doubt, one of the most recognizable examples of a marine fish species. The general public got a taste of the lovable creatures in 2003 when Pixar Studios film Finding Nemo hit the theatres. Whether or not this film has had a positive impact on the hobby remains a matter of much heated debate, but the popularity of the fish has soared since its release.

The Percula clownfish is often mistaken for the *A. ocellaris*, or false percula clownfish. The percula clown has symmetrical or mirror image stripes on both sides of the body that tend to have broader black bands at the edges, while the occelaris clown can have narrow black bands, and can have different markings on one side than the other. The black bands on the percula clown tend to grow wider as the fish grows, and in the case of older specimens, can make them appear almost totally black. Healthy Perculas have been reported to live for up to 20 years in captivity.



Wes Johnson's Percula Clown

Tank Parameters:

pH: 8.1-8.4

Temp: 72-78

S.G.: 1.020-1.025

Feeding: Omnivorous

Max Size: 3"

Safe for reef tanks

Can exhibit territorial aggression toward other clown species

Anemone or No Anemone?

The swimming motion of the clownfish, not only the percula clown, is unique among fishes. They rhythmically swim in one place while moving slightly up and down in the water column. This is believed to be an instinctive pattern that the fish exhibits while inside their host anemones and is sometimes exhibited by their close cousins who also occasionally take refuge in anemones. These cousins are, believe it or not, the damselfishes. The most common damsel to exhibit this behavior is the Three-Spot or domino damsel.

Early in the history of keeping clownfish, it was believed that in order for the clown to remain healthy, an anemone host was required. While for older wild-caught specimens this is sometimes true, for tank-raised or tank-bred specimens, this couldn't be further from the truth.

If the hobbyist decides that they wish to keep an anemone host for their specimen, this is a fascinating behavior to watch, but bear in mind that tank bred and some tank raised examples may refuse the anemone in a predator-free environment, and the money spent on these often difficult to keep invertebrates is wasted.

Because of their geographic distribution, the Percula Clown will normally adopt anemones that include Sebae, Magnificent, and Gigantic anemones, *Heteractis crispa*, *Heteractis magnifica* and *Stichodactyla gigantea*, respectively. Strangely enough, many wild-caught specimens have been known to take refuge in other places as well, such as bubble anemones, and even some species of soft corals. This can be detrimental to the coral polyps, but in most cases there's no negative effect. Coral polyps can die if continually brushed by a clown, resulting in polyp closure.

Feeding

Because all clownfish in the wild stay safely in the tentacle forest of an anemone, food tends to be either something that happens to float (or swim) by, or from some unlucky soul who ventures too near the tentacles of the host anemone. The wild clownfish is a very opportunistic feeder that eats nearly any food, from both meaty as well as vegetable sources.

Although they will eat nearly anything because of their adapted lifestyle in the wild, in the aquarium they tend to prefer small shrimps such as mysid or artemia (brine shrimp). These small shrimp are more representative of the foods they normally encounter in the wild, either swimming by or floating in the currents past their anemone hosts. Some hobbyists state that even when they provide fish, beef heart, blood worms, etc., that their clowns will target the small shrimp, and in some cases, not eat at all if they aren't provided.

What Size Tank Do Perculas Need?

Probably one of the most misunderstood things about clownfish is with respect to what size of tank they need to be housed in. Many 'authorities' state that they need a minimum tank size of 30 US gallons. Mention this to some marine biologists who study Anemonefish, and they will most likely laugh and tell you that this simply is not true. This misunderstanding came about when these fish first started being bred in captivity without anemones. When housed in an aquarium (hopefully without any predators), these fish are free to roam the breadth and width of the tank, and do so very readily. When early breeders saw this behavior, they assumed that the fish needed the space. If you look at it from a biologist's standpoint, think about how they live in the wild: They seldom leave the safety of the anemone, lest they be dinner. Most anemones are not as large as the Gigantic Anemone, and thus the fish tends to spend most of their time in a space of only a couple of gallons of water.

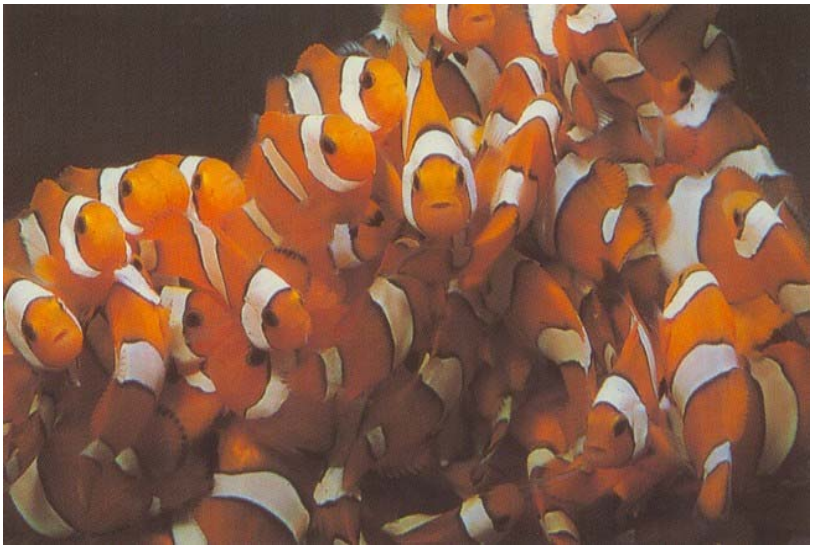
This is not to say that you can realistically keep a Percula in a very confined space like a 12 ounce soda can—the water volume just wouldn't allow for any fish to survive it. Many nano-reef keepers find that they're clowns do just fine in as small as a 3-5 gallon tank, as long as there are no members of other species of clownfish present.

Because these fish adopt an anemone for life in the wild, most clownfish exhibit territorial behavior with respect to clowns from different species. They can exhibit this behavior with members of the same species if the fish are older, sexually mature specimens that are introduced to a tank at different times. The best way to reduce or eliminate this behavior altogether is to introduce a pair of immature Perculas to a tank at the same time. The more dominant one will become female and the other male, known as protandrus (*first male*) hermaphroditism. The two can become a 'breeder pair', and may spawn in the tank, sharing the territory.

Perculas tend to be compatible with any laid-back species that is not overly territorial, or predatory, and tend to do best with similarly mild-mannered fish, such as gobies and blennies.

Breeding

Clownfish breeding, including the Percula clownfish, tends to be so easy, that many home aquarists find that their fish have paired off in the tank and have spawned right under their noses. This is, of course, dependant on the health, stress level, and age of the fish. In fact, as of 1996, 19 species of clownfish had been successfully bred in captivity, and were being sold commercially, and this number is probably higher today. The Percula, like all clowns, lay a clutch of eggs at the base of a rock and tend to care for the eggs until they hatch. Perculas have been known to 'bite the hand that feeds them' if it gets too close to their eggs!



Rotifers followed by live baby brine shrimp make excellent food for the developing fry. These plankton are easy to cultivate at home. For the adventurous hobbyist, starting a phytoplankton culture and feeding that to a rotifer culture is the way to go, These rotifers are then fed to the newly hatched fry for the first five days . Additional rotifers are ultimately fed to the baby brine shrimp, which in turn are fed to the fry. A word of caution: fry mouths are too small to consume brine shrimp before they are 5 days old, and the fry will spend so much energy trying, they'll die in the process.. Any excess shrimp can be grown out to adulthood, and fed to the adult Perculas.

There are so many commercial breeders out there, that to try and list them would be ridiculous at best. Not to mention the ease at which Perculas spawn in home tanks. Some hobbyists even sell their young fish back to the local fish store where they bought their adults specimens. How ironic is that?

Special Thanks!

We'd like to thank all the sponsors who helped us to make our inaugural meeting such a success!!

LiveAquaria.com — *One box Live Rock—Shipped*

ReefScience.com — *Beckett Protein Skimmer*

DOCTORS FOSTER & SMITH DrsFosterSmith.com — *One HQI Metal Halide Pendant With Two UV Filters*

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Aquatica - Garner - Invertebrate Food Pack and Other Items

Fish Pros - Raleigh - SeaTesT Reef Multi Test Kit

Fish World - Raleigh - Two Bags of Instant Ocean Salt

Pet Warehouse - Jacksonville - $10 Gift Certificates

Aqua Escape - Raleigh - $20 Gift Certificate

ESV - Brooklyn, NY - 1 Case of B-Ionic Packs

Stay Tuned...

Currently, the Board of Directors is in the early planning stages for another meeting. This meeting will be more of a frag trading/social meeting, which means no vendors and no talks. This event will likely take place in early December in the Charlotte, NC, or Greenville, SC, area. Stay tuned for more information as it becomes available.

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Species Spotlight Bibliography:

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