

Husbandry Update for July 23, 2012

River Journey

Seahorses

Coral shrimpfish (*Aeoliscus strigatus*) are greenish-yellow fish with a black stripe down the middle of their body. They are relatively small fish, growing to about five and half inches in length. Native to the Indian and Pacific Ocean, they swim in schools with each fish facing downward, nearly vertical, in the water. Their mouths are extremely small and designed to feed on tiny plankton such as larval (newborn) crustaceans or fish. Our coral shrimpfish are fed small mysid shrimp and other small foods. Shrimpfish are currently on display in the *Philippine Reef Edge Exhibit* in the Aquarium's seahorse gallery.



<http://www.tnaqua.org/OurAnimals/Fishes/CoralShrimpfish.aspx>

Discovery Hall

Aquarists recently placed a few male longear sunfish in the *Pascagoula* tank located in *Discovery Hall*. The new sunfish are males and brightly colored in their breeding hues. They are also more aggressive, so Aquarists will have to keep a close eye on them.

Delta Country

We have two types of live-bearing fish in the Delta Country exhibit: Western mosquito fish and least killifish. Both are small, but the least killifish is one of the smallest freshwater fishes in the world, reaching a maximum length just over an inch. Male live-bearing fish have a modified anal fin called a gonipodium that allows for internal fertilization. This fin is like the claspers on sharks, skates and rays. Eggs develop inside the female and she gives birth to live young. Larger females have the ability to produce more offspring.



least killifish



male killifish

(photos by Carol Haley)

A large, adult male eastern indigo snake was recently placed on exhibit in the *Delta*. This animal replaces the eastern diamondback rattlesnakes, canebrakes and eastern rat snake. Indigos are one of the largest North American snakes and are listed as threatened on the U.S. Fish & Wildlife Service Endangered Species List. They are one of the keystone species, along with the gopher tortoise and eastern diamondback rattlesnake, of the Sandhills/Longleaf Pine habitat. Indigos are

indiscriminate carnivores feeding on any vertebrate that they can overpower, including venomous snakes. Their genus name, *Drymarchon*, roughly translates to "forest ruler".

Our venomous snakes have been transferred to the Orienne Center for Indigo Conservation (<http://www.oriannesociety.org>) and will be used in educational programming related to pit viper conservation.

Rivers of the World

Five peacock bass (*Cichla ocellaris*) were added to the *Amazon Exhibit* in the *Rivers of the World Gallery*. This group of fish replaces the larger peacock bass which were recently moved to the *Amazon Flooded Forest Exhibit*. After being placed in a "howdy" container for approximately one hour, they were given the opportunity to leave the container on their own time. Three of them were anxious to explore their new exhibit, but two hung out in the introduction container a bit longer than the others. Although named peacock bass because of a similar look to the bass family, they are actually cichlids.

Did you know???



A Well Travelled Octopus:

There is a new giant Pacific octopus currently being housed in the *quarantine room*. This new octopus was scheduled to arrive late last week, but a shipping error caused the animal to be delivered to the Riverbanks Zoo in Columbia, South Carolina. Fortunately, the aquarium staff at Riverbanks Zoo had an octopus-proof exhibit available and they were willing to provide temporary housing for our wayward cephalopod (see attached photo of "Octo" in an exhibit at Riverbanks Zoo). Our travelling octopus was actually on exhibit at their facility for nearly a week before being re-packaged and shipped to Chattanooga. She arrived safely and is now quite comfortable at the Tennessee Aquarium.

Ocean Journey

Tropical Cove

One more epaulette egg case was found in the touch tank this week and another is expected before week's end. Recently our female epaulette has failed to produce

fertile eggs. Of her last three egg cases, two had yolks, but both were infertile. The third was a "wind egg," one without a yolk. Aquarists hope this latest egg is fertile but they will have to wait at least two weeks until the potential embryo is big enough to be seen. Eggs are checked for embryos through a process called candling. This involves putting a bright light (in our case a dive light) behind the egg case. This allows aquarists to clearly see the contents. We still have nine fertile egg cases developing, ranging from 80 days old to 35 days old. Many of the older embryos have already developed eyes. The embryo will grow in the egg case, receiving nourishment from its yolk, similar to the way a chicken grows. Epaulette shark eggs take anywhere from 130-150 days to fully develop and hatch.

Penguins' Rock

The two macaroni chicks continue to grow. The one on exhibit is now showing tail feathers and adult plumage on its flippers. This chick should be ready to swim within two weeks. The other chick hatched one week later, so it will be a bit longer before it is ready to swim for the first time.



Chaos/Paulie chick (L) & Shamrock/Hercules chick (R) photo by Thom Benson

Secret Reef (T-30)

Aquarists have developed a training plan to get our sandbar sharks to swim into the *Secret Reef* acclimation pool on cue. The first step of this training program will be teaching them to swim through a large square made of pvc pipe to obtain fish at feeding time. Eventually, the sandbar sharks will learn to swim through a small tunnel, then the gate and finally into the acclimation pool to eat. This training will be carried out to make physical examination and transport easier if necessary in the future. However, this training will have to wait as both sandbars appear to be entering their annual cycle of going off feed. Since they have been on exhibit, March 2005, feeding records show this appetite loss is a yearly occurrence in the

summer and generally lasts one to two months. The animals remain in good health and we consider this behavior normal. Food will continue to be offered to all of the sharks every Monday, Wednesday and Friday. Aquarists track feeding behavior of all of our animals.