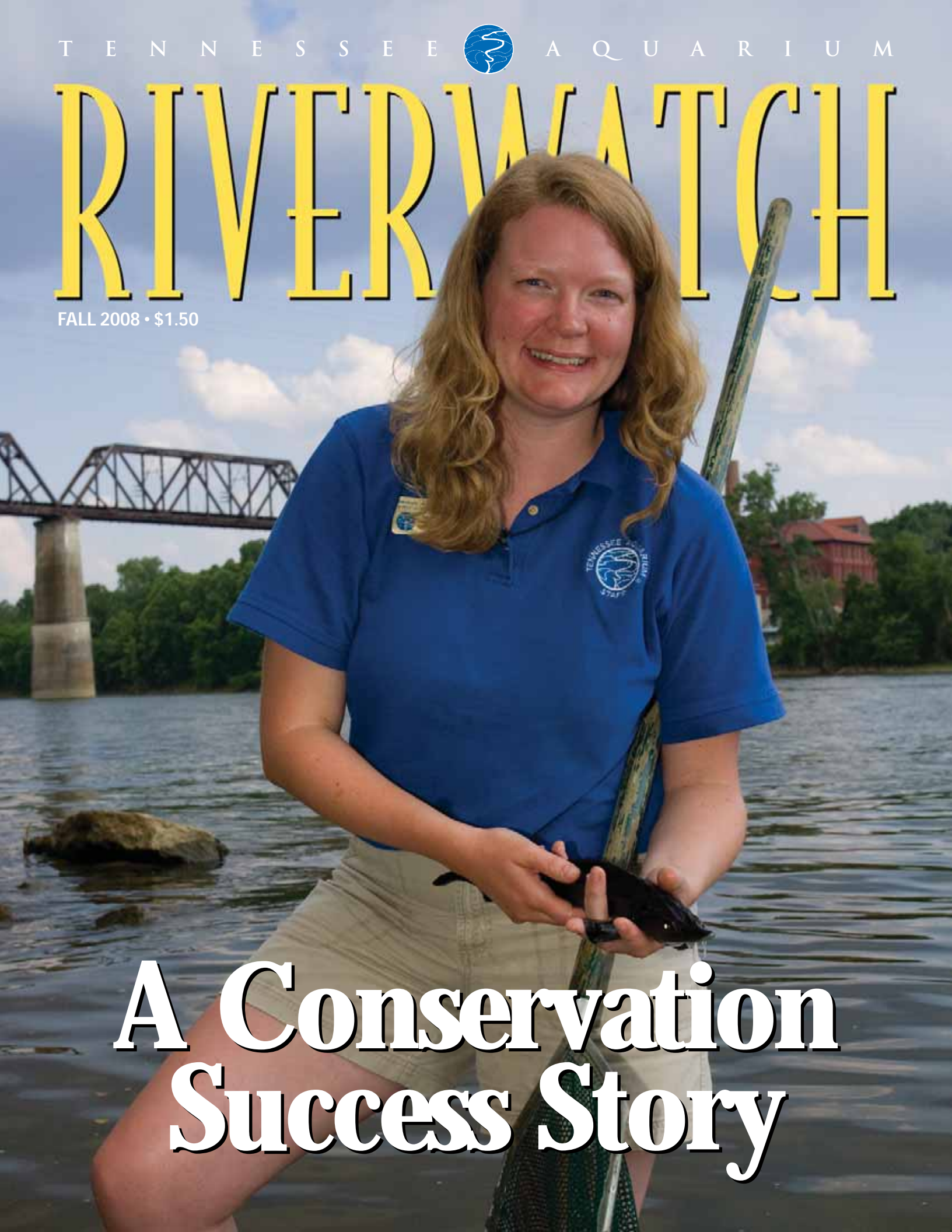


T E N N E S S E E  A Q U A R I U M

# RIVERWATCH

FALL 2008 • \$1.50

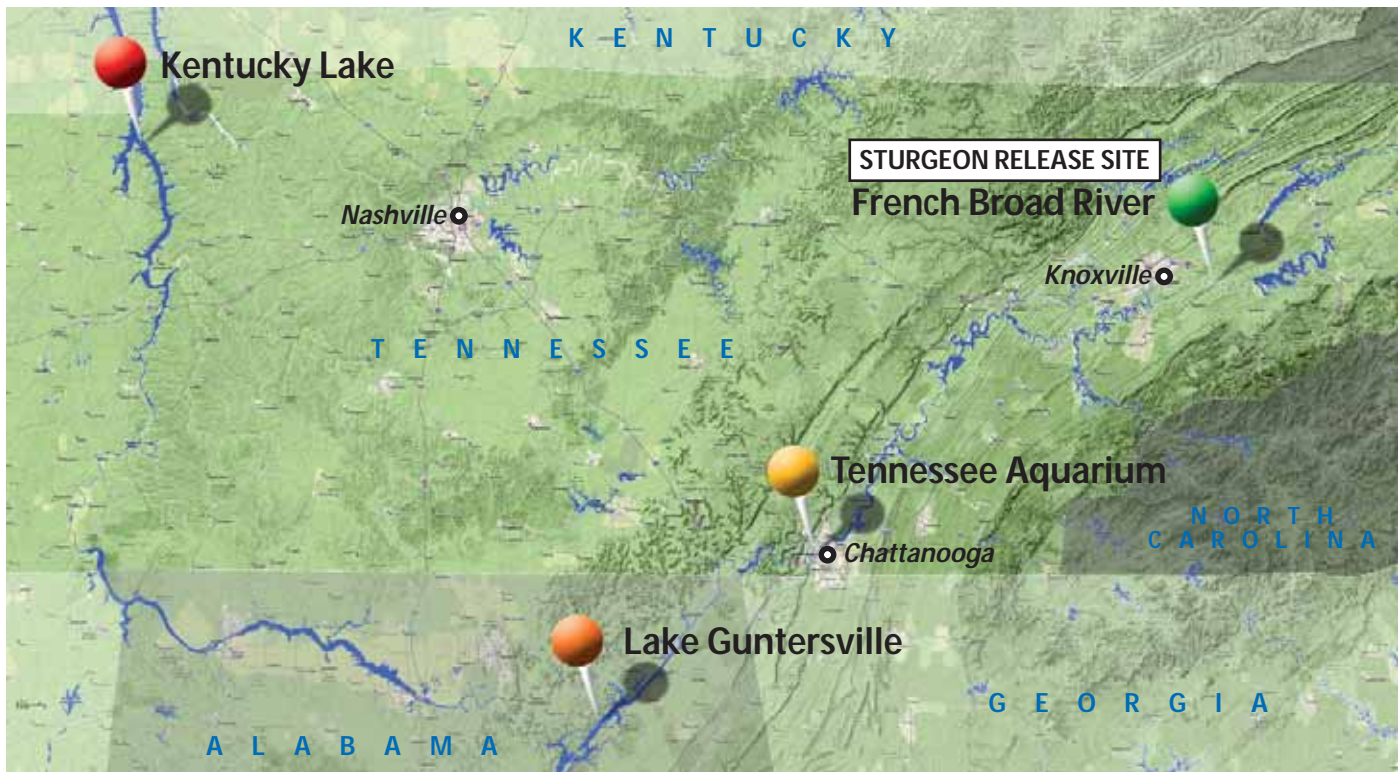


## A Conservation Success Story



# A Conservation Success Story





**By Thom Benson, communications manager**

PHOTOGRAPHY BY TODD STAILEY

Until recently, no one could remember when the last lake sturgeon roamed the waters of the Tennessee River near the Kentucky border. Historically they were at least as plentiful as other game fish such as bass, yet at least two generations have passed since a fisherman last hooked one of these ancient looking fish in the Bluegrass State. So when a recreational fisherman called Tennessee Wildlife Resources Agency to report catching a lake sturgeon in Kentucky Lake, the official on the other end of the line was understandably skeptical. After all, the only lake sturgeon in the river system were ones released by the Tennessee Aquarium in the French Broad River near Knoxville some 550 miles away. And while these fish have been moving downstream past Chattanooga and into Alabama, the farthest a confirmed lake sturgeon had been recorded was in Lake Guntersville, three lock and dams away and nearly 300 miles upstream from Kentucky Lake.

“When a second fisherman called TWRA to report catching two additional sturgeon on Kentucky Lake we

were all excited by the news. This tells us the fish we are releasing are thriving throughout the entire river system,” said Dr. Anna George, the Aquarium’s chief research scientist. When a TWRA biologist asked the second fisherman how he knew his catch was a lake sturgeon he replied, “Because I touched one at the Tennessee Aquarium in Chattanooga.”

Over 60,000 lake sturgeon have been reintroduced in the Tennessee River watershed since the Tennessee Aquarium and working partners began the Saving the Sturgeon program in 1998. Knowing a few long distance swimmers have traveled as far as Kentucky Lake lets Dr. George and others know the program is successful and entering a new phase. “We are now able to look at these achievements knowing the river is healthy enough to support these fish. And we are edging closer to the first lake sturgeon spawning in the Tennessee River in more than 40 years. Right now, monitoring the current population is just as important as continuing additional releases in the future,” explains Dr. George.

Restoring a self-sustaining population of lake sturgeon to their former range is a bit like restoring an antique automo-

*Above: The three sturgeon caught in Kentucky Lake swam over 600 miles from the release site on the French Broad River (440 miles downstream from Chattanooga). The entire length of the Tennessee River from east of Knoxville to the Ohio River is 652 miles. Opposite page, top: David Sims, Region 2 TWRA Biologist, Dr. Anna George and Lee Friedlander, Tennessee Aquarium research associate discuss the June 2008 Cumberland River sturgeon release. Most of the 300 lake sturgeon released into the Cumberland River were five to six inches in length.*

bile. If all of the pieces are not operating properly, the car may still run, but it won't run smoothly and eventually other parts may fail. Without lake sturgeon in the Tennessee River, the ecosystem wasn't whole and other animal populations were not as robust. "Bald eagles and osprey are known to eat these fish as well as a number of other fish like bass. So not only are we restoring a single species, we are also taking a big step towards restoring the entire Tennessee River ecosystem," said Dr. George.

The Aquarium was recently honored by Tennessee's Department of Environment and Conservation and Governor Phil Bredesen for this long term commitment to strengthen the connections in the web of life along the length of the Tennessee River. In June, Dr. George accepted the Governor's Environmental Stewardship Award for the Saving the Sturgeon project. "Taking care of our precious natural resources is essential to preserving Tennessee's outdoor tradition," said Governor Bredesen. The Stewardship Awards recognize exemplary voluntary actions that improve or protect our environment and natural resources with projects or initiatives that are not required by law or regulations. "Our environment impacts everything from recreational activities to the health of our communities, and I believe it is important to recognize the people and organizations that work so hard to protect it," said TDEC commissioner Jim Fyke.

Dr. George is hoping that success will truly breed more success on another waterway. In early June she began working with TWRA on a pilot reintroduction program on the Cumberland River near Nashville. A truckload of lake sturgeon fingerlings were transported from the Tennessee Aquarium Research Institute in



The Tennessee Aquarium Research Institute (TNAI) received the Award for Excellence in Aquatic Resource Preservation. Pictured above (l-r): Deputy Commissioner Paul Sloan; Dr. Anna George, Tennessee Aquarium Research Institute Director; and Office of Environmental Assistance Director Lori Munkeboe.

Cohutta, Georgia to Middle Tennessee. Today 300 lake sturgeon are feeling right at home near the Music City. "We have chosen this release site because of its large rocky habitat similar to what the sturgeon have been observed to use in Wisconsin where these fish are collected," Dr. George said.

But sturgeon aren't the only fish keeping Dr. George busy this summer. Work has begun on an Association of Zoos and Aquariums funded research project to study the diversity of fishes in ten different tributaries of the Tennessee River. She will log almost one month in the Blue Ridge Mountains surveying the number of fishes found in streams from Virginia to Georgia. "The goal of this project is to examine hotspots of species and genetic diversity within these waterways. A river or stream is going to be more resilient to environmental impacts if there is a wider array of fish or even genes within a particular species. If we can identify these locations with high diversity, we can learn what favorable conditions are in play and hopefully restore other streams based on what we learn," Dr. George said.

Touring the scenic waterways along the Blue Ridge might sound like a summer vacation, but the meticulous sampling process is the beginning of a journey of discovery. "The Southeast is home to more freshwater species than anywhere in the world, but unfortunately we also have more species which are threatened or in decline. Many research projects reveal unexpected results. By looking at these streams in a way no one has looked at them before, we may uncover new ways to improve the current health of the river systems in our backyard," concluded Dr. George. ♦



## Tennessee River Rescue 2008

The Tennessee Aquarium is proud to support and participate in the 20th anniversary of Tennessee River Rescue. This grassroots cleanup effort began with just a handful of volunteers and has grown into a movement that spans the banks of the river in three Southeast Tennessee Counties.

Aquarium staff and volunteers will once again pick up and pitch in at one of the downtown zones near the Chattanooga Riverfront. While heaping bags like these will be filled near downtown, collectively tons of trash will be removed from the shoreline during this one-day event. The Aquarium recently applied for a Clean Streams Grant from the Tennessee Wildlife Resources Agency to support Tennessee River Rescue. The grant was approved and Tennessee River Rescue will receive \$1000 in funding to help with trash removal and recycling expenses.

To get involved with this year's cleanup on Saturday, October 4, contact Tennessee River Rescue coordinator, Tennessee Aquarium lead horticulturist Christine Bock at (423) 785-4024. Volunteers will receive bags, gloves and T-shirts.

If you'd like to help make a lasting contribution to conservation in our backyard and get some great benefits in return, join the Tennessee Aquarium's Conservation Society. Simply log onto [www.tnaqua.org](http://www.tnaqua.org) to join today! 💧



## Matching Your Green Lifestyle

A T-shirt made out of bamboo fibers? Penguins carved from bamboo roots? Plush toy animals that help to educate children about endangered species? Books that give cleaning tips using natural cleaning agents like lemon juice and salt?

The Tennessee Aquarium Gift Shops are carrying an increasing line of new products based on our customers' requests for "green" items.

The featured item here is our new bamboo microfiber T-shirt, which has been very popular and is extremely soft and easy to care for. Bamboo is the fastest growing plant on the planet and serves as a renewable resource. The fiber from which this shirt is made has a natural wicking ability to keep the wearer cool and dry.

Yes, we are turning over a new leaf to support the growing trend toward green living. Our merchandise bags are biodegradable, we recycle used camera batteries (a collection box is at every register), and we carry a great selection of books on both practical and creative ways to "go green."

The Aquarium also recently received 10 recycling bins through a grant from the National Recycling Coalition. The next time you visit the Aquarium, be on the lookout for the bins. Now, you can recycle your drink bottles and other #1 and #2 plastics easily and simply at several sites throughout the Aquarium.

Come check out our new products and let us help you "green up." Remember, members can use their card to receive a discount in all our shops. 💧



# New River Journey Experiences

By Carol Farmer, assistant curator of fishes

PHOTOGRAPHY BY TODD STAILEY

When the Tennessee Aquarium opened its doors in May of 1992, it was immediately recognized as an icon for Chattanooga and the Tennessee River. The sights and sounds within reverberated the feeling of the Appalachians, the Delta and exotic regions throughout the world. Artistic features such as the saw-tooth mural, the satellite photo of the southeastern United States and the fiber-optic ceiling of the canyon all add to the ambience of this architectural marvel.

In the past sixteen years River Journey has engaged nearly 17,000,000 visitors from all over the world, hosted thousands of member events and educated hundreds of thousands of school children. In an effort to offer even more to our members and guests, the exhibits committee put their heads together and came up with many ideas to “refresh” the River Journey experience. Beginning in 2007 and continuing into 2009, River Journey will receive a significant facelift.

The first thing members and guests will notice in the lobby is the addition of three antique boats in the foreground of a large mural of a canoe gliding through the river. The boats were selected based on the history of each and the geographic region where they were used. Surrounding the lobby is a newly created soffit featuring the names of all the tributaries of the Tennessee River. According to the Nature Conservancy, the Tennessee watershed is home to the most diverse array of freshwater aquatic life in the United States. It also has one of the highest numbers of imperiled aquatic species of any large water system in North America, with 57 fish species and 47 mussel species considered threatened or endangered.

The enhancements continue as the sounds of birds and insects native to the Tennessee mountains greet guests as they ascend the large escalator toward the Appalachian Cove Forest. New flickering lights on a special ceiling above the escalator as well as a fresh air scent contribute to the feeling of hiking up a tree-canopied trail in the Smokies. Upon arrival in the remodeled space at the top of the escalator, large photo murals provide guests with a panoramic view of the mountains where the Tennessee River is born. A new wood paneled floor and walls in this space contribute further to the sense that one has just stepped onto an overlook platform built by park rangers to take in the view.

Several other enhancements have occurred in River Journey this spring, with the most notable one being the addition of the Lake Tanganyika exhibit in Rivers of the World. Central Africa’s Lake Tanganyika is the second largest and second deepest lake in the world, the first being Lake Baikal in Siberia. It is bordered by four countries and is probably best known for its diversity of freshwater cichlids. Cichlids are a family of fish that have laterally compressed bodies and dorsal fins that run from their heads to their tails. Probably some of the best known cichlids are South American natives such as oscars and angelfish. But unlike the acidic waterways of Central and South America, Lake Tanganyika is part of the rift valley, which is comprised of limestone and creates very alkaline water.

Of the 250 cichlids found in Lake Tanganyika, 98 percent are endemic, which means this is the only place they are found in the world. They appeal to aquarium enthusiasts because they are typically bright in color and can occupy various niches in a tank, giving the appearance of having several different families of fish. Guests will notice the yellow-tailed sardine cichlids occupying the upper part of the water column, blue striped humphead cichlids guarding rockpiles and the tiny royal dwarf cichlids chasing any fish that dares come within a foot of their snail shell homes. There is also a group of upside-down cuckoo catfish, named for the habit of dropping their eggs near mouthbrooding cichlids, tricking them into caring for their young. Already a clutch of several dozen four-spine cichlids can be seen in the center of this exhibit. The parents are doing a great job guarding the fry.

The Aquarium has also learned that it will receive a \$150,000 “Museums for America” grant, a prestigious and highly-competitive award made by the Institute of Museums and Library Services, a federal agency located in Washington, D.C. This grant will allow Aquarium staff to install a series of updated interpretive panels giving current information on ecosystems, plants and animals from around the world. Several new interactive stations will also be added along the path through the building.

Enjoy all of the enhancements to River Journey as we continue to identify ways to keep our experience fresh and exciting. ♦



### LAKE TANGANYIKA EXHIBIT

Cichlids can be very entertaining as they stake out territory and defend their young. *Pictured above:* A young guest explores the new exhibit. *At left, from top:* Daffodil Cichlid, Humphead Cichlid and Haplotax Cichlid.



# THRILLS, GILLS & CHILLS

During October 2008



Picture standing safely on one side of the window as a big, toothy sand tiger shark eases past your face. You know you're in the clear, and yet you feel your pulse picking up at the sight. There's also something about the way the alligators in the Delta Swamp stare at you without blinking, as if you are their lunch, that brings a tingle to the back of your neck. Or maybe it's getting inches away from a rattlesnake, anaconda or boa constrictor that gives you the heebie-jeebies. Relax and embrace the critter jitters. That's what the Aquarium's month-long celebration — *Thrills, Gills & Chills* — is all about.



Throughout October, enjoy special keeper talks and animal encounters designed to bring you up close to nature's most feared and misunderstood animals. Learn creepy and cool facts about giant Pacific octopus, poison dart frogs and the sting of jellyfish. You'll also discover why one type of seal petrifies penguins, what piranhas really choose to chomp on and what's up with the moray eels' ferocious appearance. Enjoy costumed divers during special dive shows or belly up to Shark Island and prove you aren't a fraidy cat-fish by touching a shark or ray. Or dive into "Sea Monsters 3D" at the IMAX® 3D Theater (*movie info on back page*). Don't miss the Aqua-Scarium Halloween Party on Friday, October 24th from 7-10 p.m. (*see page 14 for details*). It's a monstrous celebration so big it takes two Aquarium buildings to hold all the action. Come in costume and celebrate Halloween while watching costumed divers and characters, trick or treat for goodies and win treasure as you play games. ♦

## Thrills, Gills & Chills Daily Schedule

— FREE with Aquarium admission —

TIME	DIVE/PROGRAM	EXHIBIT	LOCATION
11 AM	Scaredy Cat-Fish COSTUME DIVE	Nickajack Lake	RJ*, Level 2
2 PM	Divers Delight COSTUME DIVE	Gulf of Mexico	RJ, Level 3
3 PM	Swamp Things PROGRAM	Delta Swamp	RJ, Level 3
10:30 AM	Pumpkins & Penguins PROGRAM	Penguins' Rock	OJ, Level 2
11 AM	Bite Fright DIVE	Secret Reef	OJ, Level 2
11:30 AM	Bite Fright DIVE	Secret Reef	OJ, Level 2
1:30 AM	Jaws & Claws ANIMAL FEEDINGS	Boneless Beauties	OJ, Level 2
1:45 AM	Pumpkins & Penguins PROGRAM	Penguins' Rock	OJ, Level 2
2 PM	Bite Fright DIVE	Secret Reef	OJ, Level 2
2:30 PM	Bite Fright DIVE	Secret Reef	OJ, Level 2

\*RJ = RIVER JOURNEY OJ = OCEAN JOURNEY

Thrills, Gills & Chills is presented by:





In each *Riverwatch* issue, look for information and activities in this section. Collect the Tennessee Aquarium's Animal Trading Cards and look for special member programs for collectors.

CONTENT FOR GETTING OUR FEET WET IS PROVIDED BY THE TENNESSEE AQUARIUM EDUCATION DEPARTMENT.

Yellow-banded Poison Dart Frog  
*Dendrobates leucomelas*



## WHAT'S IN YOUR WATER?

What is in your water really does matter! Do the water magic trick below to discover how adding just one substance to water can change what that water does.

### YOU WILL NEED:

1. Cold, salt water in a clear cup (not too full!).  
*Hint: Dissolve the salt in warm water until no more will dissolve. Refrigerate overnight.*
2. Warm, plain (fresh) water with food coloring added.
3. Dropper.

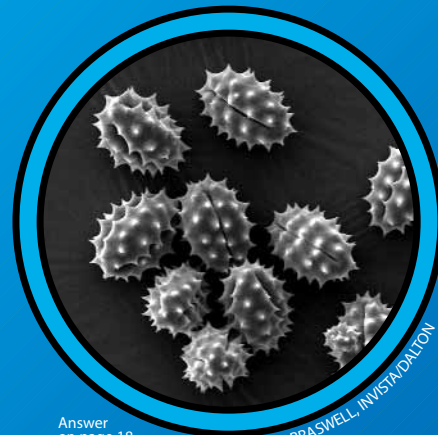
Tilt the cup of salt water and hold it very still. Squeeze the dropper gently to SLIDE drops of warm, colored water down the inside of the cup. Do not drip or squirt the warm colored water into the cup or the water magic won't work. After you have added at least five droppers of the warm, colored water to the cold, salt water, gently set the salt water cup upright. What has happened? Why?

ANSWERS:  
The warm, colored water is floating on top of the cold, salt water. The salt in the cold water makes the water denser. There's more stuff in there. It holds up the less dense fresh water. (Cold water is also denser than warm water. This helps the water magic work even better.)

Blue Tang  
*Acanthurus coeruleus*



## WHAT IS IT?



Answer on page 18

JEFF BRASWELL, INVISIBDALTON

## SILLY ANIMAL JOKES & RIDDLES

Which frogs can jump higher than a house?

*All of them... a house can't jump*

We want you to participate! Please send your silly animal jokes or riddles and your questions for "How Do They Do That?" by e-mail to: [jal@tnaqua.org](mailto:jal@tnaqua.org) Please include your name and age on all submissions.

Tennessee Aquarium **A010**

**Yellow-banded Poison Dart Frog**  
*Dendrobates leucomelas*

- **Habitat** — Yellow-banded poison dart frogs prefer wet humid areas such as moist stones, wet tree trunks and roots. They are found in Venezuela, northern Brazil, Guyana and south-easter Columbia.
- **Diet** — Ants, termites, tiny beetles, crickets, other small insects and small spiders make up the vast part of the diet of yellow-banded poison dart frogs.
- **Size** — Yellow-banded dart frogs are small frogs growing to be 1.2-2 inches (3.1-5 cm).

**WOW!** Male yellow-banded poison dart frogs are responsible for tending to the eggs and newly hatched tadpoles. One of his duties involves transporting them to water-filled bromeliads high in the rain-forest canopy.

Yellow-banded poison dart frogs can be seen in the Discovery Hall exhibit on Level 3 of the Tennessee Aquarium's River Journey building.

Tennessee Aquarium **F069**

**Blue Tang**  
*Acanthurus coeruleus*

- **Habitat** — Blue tangs can be found in waters around Florida, the Bahamas, the Caribbean, Gulf of Mexico, Bermuda, north to New York and south to Brazil.
- **Diet** — Blue tangs use brush-like teeth to scrape algae off of the reef.
- **Size** — These small fish reach a length of 5-15 inches (12.7-38.1 cm).

**WOW!** Juvenile blue tangs are bright yellow, turning blue from head to tail as they mature.

Blue tangs can be seen in the Gulf of Mexico exhibit on Level 3 of the Tennessee Aquarium's River Journey Building and in the Secret Reef exhibit on Level 2 of the Ocean Journey building.

**WHAT IS IT?**



TODD STALLEY

It's goldenrod pollen. Some people blame this native North American plant for fall allergies. But the pollen grains are too heavy to float in the wind. So if you're sneezing, it's probably ragweed which blooms at the same time as goldenrod. The Bluegrass State of Kentucky adopted this yellow bloomed herb as its state flower.

**HOW DO THEY DO THAT?**

We asked Kevin Calhoon, Assistant Curator of Forests:

**How do we create four distinct seasons in the Delta Country exhibit?**

In the Delta Country, four seasons are not really created. Kevin replied, "We reduce the water temperature in the Delta Country for the cold months. By lowering the water temperature, the metabolisms of the alligators and turtles slow down in the fall and winter which is natural for an ectothermic animal. With a slower metabolism, these reptiles not only need less to eat but have the capability to spend more time underwater without coming up for a breath. However, the plants in the Delta Country do display seasonal change. These changes occur because the air temperature in the Delta Country is not mechanically regulated and parallels the temperature out of doors." How can you be sure? Visit the Delta Country exhibit throughout the year.



**DON'T BE A LITTERBUG! CRAFT**

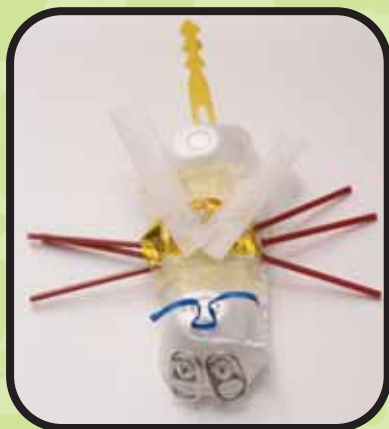
This is a fun and creative way to keep trash out of the landfills. You may want to start collecting small pieces of "junk" early to create a good craft supply for your litterbugs. Watch what you throw in the trash. A lot of things can be used for bug body parts.

**MATERIALS:**

- **Egg cartons**
- **Glue** – Use rubber cement or hot glue on the Styrofoam cartons.
- **Litter** – Good things to collect are twist-ties, straws, hard candy wrappers, bottle tops, and bread bag tabs.

**DIRECTIONS:**

1. Cut your egg carton into sections for the litterbug's body. Remember, insects have three-sectioned bodies! The head, thorax and abdomen. Add your legs to the thorax which is the middle section.
2. Go through your litter collection and find eyes, antenna, legs, wings, mandibles (jaws), etc... You may need to change some pieces by cutting them into smaller pieces.
3. Glue your litter on to your bug's body. School glue works but takes a while to dry. Rubber cement is a good option. You may want to use a hot glue gun with an adult's supervision.
4. Enjoy your litterbugs company. Keep him around to remind you not to litter and be sure that you re-use materials before you throw them away!



# Extraordinary Bird Habitat

By Thom Benson, *communications manager*

The geographic location and terrain of the Tennessee River Gorge creates a unique set of land forms and micro-climates. The resulting habitats support more than 1,000 varieties of plants, ferns, trees and flowers, as well as an amazing array of wildlife species including:

- 184 species of birds
- 63 species of mammals
- 193 species of butterflies

Vast stretches of riparian habitat, or vegetation zone along the river, remain within the Gorge. These biologically important zones are rapidly diminishing throughout the United States. In fact, the United States Department of Agriculture estimates that less than one third of the 100 million acres of riparian habitat once found in the United States remains today. This habitat not only helps preserve water quality in the area, it also provides the food and shelter for migratory and resident birds and other wildlife.

Kevin Calhoun, the Aquarium's assistant curator of forests, says the River Gorge is one of the finest locations in the region to go bird watching. "Here in the ridge and valley section of the state so much has been developed, so many of the wooded areas and riparian areas have been cut down. But in the River Gorge you have large tracts of unbroken forest on both sides of the river."

Calhoun is an avian expert who is the official statistician for the Tennessee Ornithological Society in Chattanooga. He is also responsible for compiling the Hiwassee and Chattanooga Christmas Bird Counts, as well as managing the data for the National Migration Count in Hamilton County. Calhoun is well qualified to interpret data to evaluate exceptional habitats.

The habits of cerulean warblers and American

*Three osprey fledglings and their parents were a joy to watch in their nest on a channel marker near Williams Island. Inset photo is by Aquarium guest William B. Palmer, who captured this fantastic image on the River Gorge Explorer's first public voyage on June 27.*



redstarts tell Kevin the Tennessee River Gorge is one special place. “The cerulean warblers breed around the Pot Point Cabin and they’re not found breeding anywhere else besides the River Gorge in this part of Tennessee,” Calhoon said. “The cerulean warbler has been declared a species in need of management because their population is declining. Yet these little bluish birds have been regular breeders in the same area as the redstart. That tells you something about the quality of the habitat.”

Other birds are more visible reminders that the River Gorge is unique. Its thermals are very inviting to migrating hawks. The broad-winged hawk is just one of many seasonal travelers. “They tend to travel in big groups called kettles,” Calhoon said. “Sometimes they form huge groups, especially during the fall migrations. But other species like red-tailed hawks, red-shouldered hawks, sharp-shinned and Cooper’s hawks follow the ridges and use the thermals.”

Many other large-winged residents such as ospreys and American bald eagles are common sights overhead. Both nest in the gorge. “The rare birds we get in here are migrating peregrine falcons and sometimes merlins, which are small falcons,” Calhoon said.

Autumn is prime time for viewing raptors in the Gorge. On Saturday, October 4, Calhoon will lead a special excursion aboard the River Gorge Explorer to see these long-distance migrants and talk about their behavior.

Birds you are likely to see on every trip aboard the River Gorge Explorer are great blue herons, which nest in big numbers on Williams Island. Belted kingfishers dig burrows for nests along the river banks and should be seen on virtually every outing. Turkey and black vultures can



*Above: A belted kingfisher. Below: The River Gorge Explorer makes daily trips into the Tennessee River Gorge, a birder’s paradise. See page 11 for the Hawk Watch Cruise event.*

be seen circling overhead in the rising air currents.

Birders will use both a sharp eye and keen ear while searching for songbirds, raptors and woodpeckers while drifting in the gorge. “Sound carries well over water, so listen closely for the drumming of pileated woodpeckers, the high-pitched whistle of broad-winged hawks and the various songs of neo-tropical migrants while on the river,” Calhoon said.

Not only is the Tennessee River Gorge a bird paradise, it also offers a kaleidoscope of birds that change with the seasons. Make plans to be a frequent birder aboard the Aquarium’s River Gorge Explorer. 💧



## VIPs visit the Tennessee Aquarium

The Tennessee Aquarium hosted some distinguished guests in May.

U.S. Supreme Court Justice John Paul Stephens didn't deliberate long before rendering his decision about visiting the Tennessee Aquarium saying, "You are certainly entitled to be proud of such an excellent and successful enterprise." Justice Stephens was in Chattanooga to address the 68th conference of the U.S. Court of Appeals for the 6th Circuit, but he took time out for a special tour of both Aquarium buildings.

Justice Stephens enjoyed his visit so much he told the large crowd of judges and attorneys how impressed he was by the Aquarium and our gentoo and macaroni penguins. Later, in a personal letter to Charlie Arant, Aquarium president and CEO, Justice Stephens thanked everyone for the "enlightening tour of your fascinating aquarium." He displayed his sense of humor by adding, "However, I trust that you won't expect me to volunteer for shark monitoring duty."



Justice John Paul Stephens meets the penguins.

TODD STALEY



Jean-Michel Cousteau

Ocean explorer and conservationist Jean-Michel Cousteau helped launch "Dolphins and Whales 3D" at the IMAX Theater by giving a fun and fact-filled presentation about cetaceans and the health of our oceans. Cousteau recalled his days diving with his father Jacques and life aboard the research ship "Calypso."

While touring Ocean Journey, Cousteau had high praise for the Aquarium's design and robust collection of fish and other animals. "You should be very proud of your Aquarium. It is a beautiful place to see," said Cousteau. The Aquarium's focus on freshwater conservation also impressed Mr. Cousteau. Known as the founder of the nonprofit Ocean Futures Society, he was quick to point out one of his documentaries began with singer John Denver in the Rocky Mountains. "Our rivers are the roots of the oceans, and our oceans are the life support system for all of us."

Cousteau was also pleased to hear about the Aquarium's "Saving the Sturgeon" program. His face lit up with a smile when he learned the program had recently received the Environmental Stewardship Award. "Plaque or check? Plaques are nice, but checks keep good programs operating," said Cousteau. 💧



KAREN ESTES

## A Life-Saving Donation

Thanks to local physician Dr. Stephen DePasquale, Erlanger hospital and Parkridge Medical Center, and the nonprofit organization Stop Heart Attack, the Tennessee Aquarium now has three additional automated external defibrillators (AEDs). These life-saving devices have been installed in public areas in River Journey, Ocean Journey and the IMAX® 3D Theater.

Nearly four years ago, Dr. DePasquale's 11-year-old son Nicholas died due to a sudden cardiac event. Dr. DePasquale was unable to revive his son using cardiopulmonary resuscitation (CPR), however Nicholas might have been revived if an automatic external defibrillator had been available. In his memory, Dr. DePasquale established the Nicholas' Heart Fund to help save the lives of others who are affected by sudden cardiac arrest by making AEDs readily available in public places where groups of people gather, including the Tennessee Aquarium.

One of Dr. DePasquale's goals is to place AEDs in all 79 Hamilton County Schools. So far, the Nicholas' Heart Fund has raised enough money to install AEDs in 40 schools. Dr. DePasquale hopes donating AEDs to the Aquarium will strengthen his efforts to place more of these life-saving devices in schools.

"If we can make AEDs more visible to the public at the Tennessee Aquarium, it's possible more people will contribute our cause and we'll be able to purchase more AEDs for schools," Dr. DePasquale said.

Visit [www.nicholasheartfund.com](http://www.nicholasheartfund.com) For more information about the heart fund. 💧

## Combined Federal Campaign

The Tennessee Aquarium has been selected to participate in the 2008 Combined Federal Campaign. If you work for a federal agency or organization, you may now elect to contribute to the Aquarium's award winning conservation and education programs through payroll deduction. Tennessee Aquarium Agency Number: 58777. Thank you for supporting the Aquarium's conservation and education work. 💧

## Turn Over a New Leaf... Become a Tennessee Aquarium Volunteer this Fall!



Fall is a perfect time to start something new, something you have never tried before. So you are invited to join the Tennessee Aquarium Volunteer program this fall. You will join a team of over 600 volunteers who make visiting the Tennessee Aquarium a rich and lively experience. Guests frequently call or e-mail to tell us about the fun interactions they have with our volunteers. Cheerful volunteers who share an interesting fact about an animal or habitat often turn an average visit to the Aquarium into a talked about experience of a life time. Our animals are fun to watch, but our volunteer docents engage guests with an unforgettable dose of Chattanooga hospitality and interesting animal facts.

The word docent means sharer of knowledge, and we will provide complete training for anyone over 18 that has a few hours a week to donate to the Aquarium. No experience is necessary. We will train you on the plants and animals that live within the Tennessee Aquarium. You will be equipped with interesting and fun facts that will impress any visitor. Training is scheduled on Tuesday evenings beginning September 23, 2008. Docent shifts are available each day of the week from 9:30 a.m. - 2 p.m. or 1:30 p.m. - 6 p.m. Volunteers are needed everyday of the week; especially on Friday, Saturday and Sunday. Commitment: Once a week or every other week for 4 1/2 hours.

Youth volunteers are high school students with one year of high school biology. As a youth volunteer you will help visitors locate camouflaged animals, assist with touching a live sturgeon or tell visitors how much an alligator snapping turtle weighs. This is a great way to volunteer with fellow students and meet students from other schools. Youth also gain important experience interacting with adults and children of all ages. Commitment: Twice a month for 4 1/2 hours any day of the week. Attend four fall training classes beginning on Thursday, October 2, 2008 from 4:30 to 6 p.m.

### Volunteers receive great benefits:

- Gift shop discounts
- Volunteer uniform
- Free parking
- Meeting people from all over the world
- Limited number of free Aquarium and IMAX passes
- Social activities



If you like meeting new people, and are interested in plants and animals, call the volunteer office to schedule a meeting with us. We're looking for fun-loving people who believe in giving great customer service. For more information on volunteering call the volunteer office (423) 785-3057 or visit [www.tnaqua.org](http://www.tnaqua.org).

I've been an Aquarium member and volunteer since 2001. I can't imagine not being a part of the Aquarium. I volunteer every Wednesday morning. I think it's important not only to give my time, but to support the Aquarium financially as well. I support capital projects, such as the penguins campaign, and I make an annual contribution as well. The Aquarium is worthy of my support.

Nancy Mapel  
Tennessee Aquarium Volunteer



KAREN ESTES

## Tennessee Aquarium 2008 Business Partners

The Aquarium gratefully acknowledges our Business Partners. These partnerships help support the Aquarium's many conservation, education and research programs. To learn how you can become an Official Business Partner, please contact Meredith Lewallen at (423) 785-3019 or email [mml@tnaqua.org](mailto:mml@tnaqua.org).

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## With your help, we're changing the way young people connect with the natural world.

Each summer, more than 650 children head to the Aquarium for the unique educational and fun experience that is summer camp. From the very youngest Aquatots to middle school-age Eco Explorers, Aquarium summer camp is the hottest ticket in town.

Several years ago, the Aquarium recognized that camp was beyond the reach of some families. With support from Business Partners, Conservation Society members, Patron Members and many others, the Aquarium is able to provide camp scholarships to deserving children through community-based organizations such as Big Brothers Big Sisters and United Way. Without support from generous friends like you, this would not be possible.

You can help the Aquarium provide "camperships" to children who need them by becoming a member of the Conservation

Society. Join at the highest level of commitment to become a part of the Aquarium's inner circle, supporting not only the Aquarium, but the community at large.

### Join the Conservation Society today!

Your annual gift not only includes your Aquarium membership and exclusive privileges but also supports the Aquarium's conservation and education work in the community. Your gift may just make summer camp possible

#### LEVELS OF GIVING

Founder	\$5,000+
Chairman	\$2,500-\$4,999
President	\$1,000-\$2,499

for a child whose family would otherwise not be able to afford it. For a free brochure or more information on how your contribution will be used, please visit [www.tnaqua.org](http://www.tnaqua.org) and click on Contributions and Membership.



# TENNESSEE AQUARIUM

Inspiring wonder and appreciation for the natural world

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The Tennessee Aquarium is a non-profit institution. Your dollars support our many education, conservation and research programs. Visit [www.tnaqua.org](http://www.tnaqua.org).

**VISION**

The Tennessee Aquarium inspires wonder and appreciation for the natural world.

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# SPECIAL OCTOBER SHOWING

# SEA MONSTERS 3D

## A PREHISTORIC ADVENTURE

Meet the most chilling creatures the world has ever known at the IMAX® 3D Theater when "Sea Monsters 3D" returns to the giant screen for the month of October. "Sea Monsters 3D" places you face-to-face with long-necked plesiosaurs, ferocious flipped crocodiles, fierce sharks, and the most dangerous sea monsters of all, the mosasaurs.

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