COLDWATER KINGS: BROOK TROUT

PLUS: Keeper Kids Spring Break Fun, Deepwater Discoveries and Ocean Lessons, Hunting Down Giant Fish Tales and more!
The Appalachian Mountains and Great Smoky Mountains National Park are on every fly fisherman’s list of trout destinations. Unlike the monster fish that lure anglers out west, the Southern Appalachian brook trout is the coveted jewel here. Though only reaching about 10 inches in length, this species offers vibrant colors and a feisty spirit.

They prefer headwater streams where the canopy vegetation is thick and the water is cold year round. As a result, it’s often no easy feat to find them. The quest begins by hiking deep into the mountain forest through rugged terrain. Determined anglers seek pristine springhead waters where the river flows out of the mountain to discover where the brookie population is thriving.

Being the only salmonid (family of trout, char and salmon) native to most of the eastern United States, brook trout have been king of the mountain spring ecosystem in this region since the last ice age. Because of logging, land clearing, cattle and competition from stocked game fish, native brook trout populations are scarce. Rainbow trout from the western United States, brown trout from Europe and even larger strains of brook trout from the Northeast are among their toughest competition when they are stocked into the rivers. Food and space are lost to the larger fish, and hybridization can occur between native brook trout and the introduced strains.

Fishermen and naturalists alike are fascinated with trout of all kinds because of their striking colors. Brook, rainbow and brown trout are all displayed in the Cove Forest of our River Journey building. These exhibits let
guests get a good look at the details and patterns on each species that are often overlooked when seeing them from above the water. Rainbow trout have dark speckles on their fins and bright pink and green running the length of their bodies. Brown trout, as the name implies, are golden brown in color with dark brown spots all over. Though they are potentially the dullest of the trout living in our mountains, they do glisten in the sunlight as they swim near the surface. Both of these species get very large, often reaching lengths of two feet.

The most vibrantly colored, yet smallest of the locals, is the brook trout. Their fins are bright red with white trimming and their bodies are speckled with white and pink spots over a shimmering brown surface. The dorsal fin is mottled with brown and gold, giving this species a distinctive coloration that cannot be mistaken. Brook trout are actually a char and not a trout. In fact, they are more closely related to Arctic char than to the rainbow or brown trout they share the rivers with and consequently offer more of the fiery red and orange coloration. Southern Appalachian brook trout are small, even as mature adults, but the northern varieties can get pretty large with the current record at 14.5 pounds!

Another truly exceptional characteristic of brook trout is their ability to swim against the current. Watching this behavior while snorkeling in the river, or even while cleaning the Aquarium’s exhibits, I am amazed by the incredible adaptations of these fish. Even in the super fast-moving waters of mountain streams, these fish seem to hover effortlessly in the water column catching insects and fighting over the best spots in the current. As I struggle to keep my footing for a photograph, or fight the current while I’m in the exhibit, I stare in awe at the king of the mountains.

TROUT — A Sustainable Choice for Dinner!
Check out related Member Events on page 14, and go online to learn more at: tnaqua.org/SustainableSeafood
Have you ever considered how we use our senses: sight, touch, smell, taste and hearing? Or how we would stay connected to the natural world without our senses? The way we use (or don’t use) these abilities sets us apart from every other creature. Each species uses senses in unique ways.

As an aviculturist, I’ve learned that most birds don’t rely on taste or smell to find food. They use sight and touch instead. Many birds prefer foods that are rich in a variety of colors and textures.

Mammals such as our North American river otters, woodchuck and flying squirrel, and marsupials like our Virginia opossum, rely mainly on smell and texture when searching for food. Fish and certain amphibians on the other hand, have a “lateral line,” a type of organ that senses movement in the water. It lets these critters know when predators or prey are nearby in the same way we combine our sense of touch with hearing. Sharks have a lateral line and a special sensory organ that allows them to detect electrical and magnetic changes in the environment around them.

Snakes don’t have ears (one big difference distinguishing them from lizards), so they use their sense of touch along their entire body to “hear” vibrations around them. Did you know a snake’s sense of smell and taste is even...
more closely connected than human olfactory and gustatory senses? The reason snakes frequently flick their tongues is because they are utilizing their Jacobsen's organ to “smell” the air to determine their surroundings.

While snakes and other animals utilize numerous senses simultaneously, jellyfish pretty much rely on only one sense — touch. Jellies have primitive eye spots which can detect light and dark, but they don’t have any ears or sense of hearing and no true way to smell or taste. Jellies are simply opportunistic, literally eating when food bumps into them. Their ability to sting upon touch is an automatic response. Without it, they’d go hungry.

As keepers, we have to develop a sixth sense — the ability to understand how the world appears to animals. If we’re able to sharpen this skill, we can quickly read their behavioral cues to ensure their well-being. This requires a lot of patience and a keen eye for noticing even small changes in the environment or in an animal’s behavior.

In addition to being animal behavior experts, we also need a complete knowledge of the exhibit operations (pumps, filtration, temperature ranges, etc.), knowledge of possible medical issues each species could encounter and even a good grasp of math. The Aquarium’s husbandry staff makes animal care look easy after years of developing all of these different skill sets.

During Backstage Pass tours, Aquarium guests are interested in how the animals are fed, the quantity of food they are given, and what we feed them. This varies from

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**GO BEHIND THE SCENES**

throughout the year with the Tennessee Aquarium’s Backstage Pass. You’ll get VIP access, like never before, to get up-close, touch and feed some of our animals. Each of the 45-minute Backstage Pass options takes you on a guided experience to “Keeper-Only” areas of the Aquarium and includes an Animal Encounter program.

**OCEAN JOURNEY: Daily @ 11 AM** Get a backstage bird’s eye view of the gentoo and macaroni penguins, then meet SCUBA divers as they prepare to swim with sharks. Visit the café to see the menu for starfish, octopus and thousands of other sea creatures and then deliver some tasty treats to stingrays. Finish with a face-to-face Animal Encounter.

**RIVER JOURNEY: Daily @ 1:30 PM** This tour begins with a timely job: food delivery to the North American river otters. Meet an otter keeper and learn what it takes to care for these feisty mammals. See new or newborn animals in the Quarantine room, and then discover what it takes to keep the Aquarium humming every day. Expect the unexpected when the experience concludes with an engaging Animal Encounter.

**RESERVE YOUR TOUR TODAY:** [tnaqua.org/PlanYourVisit/BackstagePass.aspx](http://tnaqua.org/PlanYourVisit/BackstagePass.aspx)
exhibit to exhibit, but all of our animals have a specific diet plan and feeding schedule. Some animals, such as butterflies and jellyfish, can eat without the chance of becoming overweight or overfed. However, we must constantly monitor the amount and type of food that other animals receive to ensure that they don’t become overweight. Like humans, animals that pack on a few extra pounds (or ounces) can experience health problems. There may be complications with moving, breathing and stress on their organs.

Anyone who’s tried to lose weight knows how difficult dieting can be. Imagine if you’re trying to put a shark on a diet. We feed our sharks a certain percentage of food each Monday, Wednesday, and Friday to keep them full and healthy. By keeping their bellies relatively full throughout the week, they have less desire to hunt the other fish on exhibit. And our staff has found the feeding “sweet spot” by giving them everything they need without overfeeding, which could cause the sharks to become overweight.

While sharks aren’t eating machines, some animals don’t have a very developed sense of fullness and will eat whenever you present food to them. This includes the river otters, sea turtles and most of the fish. The daily diets for these animals are closely monitored to insure they don’t “over-do” it.

If you would like to learn even more about what goes on behind-the-scenes at the Tennessee Aquarium, you have several amazing opportunities. Daily Backstage Pass tours allow guests into “Keeper Only” areas to get a feel for what it takes to maintain our world-class exhibits. And for the more adventurous, our spring break Keeper Kids programs allow budding biologists a chance to try their hand at feeding some animals, creating enrichment items for other creatures and meeting Aquarium staff members. After doing so, you’ll have a better sense of what it takes to keep our animals healthy and happy.

March 10th to April 8th
FREE with admission
Spring break turns into a wild adventure at the Tennessee Aquarium when kids get a chance to get closer to some of the Aquarium’s most amazing animals and discover what it’s like to care for them. Explore behind the scenes, meet penguin experts, feed feisty otters, make enrichment toys for playful parrots or learn what it takes to properly wrangle reptiles. Kids may choose two of the 19 different activities offered throughout the day. Programs lasts approximately 15-20 minutes and are available on a first-come, first-served basis.

KEEPER KIDS SCHEDULE

10:30 AM Butterflies, Birds and Blooms
10:45 AM Serve the Ray Buffet
10:45 AM Otter Edibles and Trout Chow
11:00 AM Behind the Scenes Penguin Peek
11:00 AM Explore the Quarantine Room
11:15 AM Behind the Scenes with SCUBA Divers
12:30 PM Really Awesome Reptiles
1:15 PM Behind the Scenes Penguin Peek
1:30 PM Sharks and Sea Turtles Adventure
1:30 PM Behind the Scenes — Rivers of the World
1:30 PM Meet the Aquarium’s Dr. Dolittle (M, W, F only)
1:45 PM Behind the Scenes with SCUBA Divers
2:00 PM Explore a Fish Laboratory
2:30 PM Splashy Fun: Otter Enrichment
2:45 PM Really Awesome Reptiles
3:00 PM Secret Reef Feeding Frenzy
3:30 PM Parrot Playtime: Macaw Enrichment
4:00 PM “Bake” a batch of fish food
4:00 PM Butterflies, Birds and Blooms
Ballard’s Mission: The Unexplored Ocean

By Susannah Taylor, NOAA grant coordinator

When Dr. Robert Ballard descended into the Pacific ocean in the summer of 1973, it was thought that no plant life and only very little animal life could exist in the deep ocean.

But while Dr. Ballard was searching for volcanic features in the Galapagos Rift, life is just what Dr. Ballard and his teammates found. This expedition made the landmark discoveries of hydrothermal vents and the life sustained by the chemicals expelled from these vents. These groundbreaking discoveries were made entirely by accident.

During his recent talk at the Tennessee Aquarium, Dr. Ballard shared with the community the importance of continuing exploration that leads to such accidents. Even the search for the Titanic was actually an after-thought to a Navy investigation of two Cold War era nuclear submarines. Ballard’s deep ocean expeditions resulted in geological, biological, historical discoveries and much more. This is why Ballard urges people who care about the ocean to tell their Congressional Representatives how important it is to explore the oceans, especially the United States’ own waters.

A lifelong deep ocean explorer, Dr. Ballard has conducted more than 120 expeditions and pioneered discovery in an area that is largely unexplored. “Seventy-two percent of our planet is covered by the sea, including half of the United States of America. Yet we have better maps of Mars and the moon than our own country,” says Ballard. He refers to U.S. territorial waters, the aquatic portion of our country, as “Unknown America,” which Ballard says contains “important and vast resources that will benefit the human race and the global economy.”

Thanks to advances in technology, we too can witness the major scientific discoveries that may be changing our world. When Dr. Ballard first began exploring the deep ocean, expeditions meant climbing inside a very small submersible that required a total of five hours just to reach the ocean floor. In an attempt to make exploration quicker and more comfortable, Dr. Ballard began working on remotely operated vehicles (ROVs) equipped with live video feeds. Thanks to ROVs, “we can remain on the bottom 24/7 and take anyone in the world down to the depths of the sea the moment a discovery is made,” says Ballard.

Dr. Ballard’s expedition ship, the E/V Nautilus and its use of “tele-presence” technology, allows researchers to stream their discoveries to learners of all ages across the globe. “Any discovery we make in the deep sea affects everyone on Earth,” says Ballard. “Whether it is the origins of life on Earth, new mineral deposits, or the impact it has on kids in the schools of Tennessee that now want to become a scientist or engineer.”

During the last year on the expedition’s website, www.nautilislive.org, viewers watched as the expedition found an Italian World War II plane off the coast of Sicily, deep-water coral habitats off the coast of Israel and much more.

Ballard was the latest speaker brought to the Aquarium through a generous grant from the National Oceanic and Atmospheric Administration. We invite you to join us for the final speaker, freshwater advocate and National Geographic Emerging Explorer, Alexandra Cousteau, on September 6, 2012.
It’s pretty easy to stay enthusiastic about being a Tennessee Aquarium educator. We get to see young faces light up as they embark on a journey to distant places while discovering fascinating animals and habitats. “Is that real?”, “Can I touch it?” and “Wow, this is so cool!” are some of the comments I hear from excited students during a marine invertebrate encounter at the Tennessee Aquarium. Up-close and hands-on learning experiences make every outing special for our school visitors. We know from experience these field trips are not only eye-opening, but in some cases they are also life changing.

Over the last three years we have been delivering more programs focused on Ocean Literacy, a teaching model developed to raise awareness about our connection to the ocean. This is a concept many inland students and adults have a hard time grasping, especially because they live hundreds of miles from a coast. While most children are familiar with ocean animals and basic ocean concepts, much of their information is from popular TV characters and fantasy creatures. Many local children have not had the opportunity to build their own first-hand experience with the ocean.

The Aquarium offers opportunities for students to learn real ocean science directly through live animal encounters, interactive exhibits and hands-on education programs. Senior educator Julia Gregory says she enjoys teaching ocean literacy because children seem to have an innate awe and a reverence for the sea. “Perhaps it’s because it’s so big or so powerful or so mysterious, but they love it and want to know more,” said Gregory. “The trick is to nurture that attachment while showing them that the ocean needs our help to remain healthy and full of life.”

Unfortunately, field trips are not easily within reach for many schools currently. Faced with budget cuts and high-stakes testing, many administrators have to make difficult choices. Funding for experiential learning is drying up at a time when environmental education is critical. In most cases, teachers must prove a field trip will meet their curriculum and testing needs. As a supportive educational resource, the Tennessee Aquarium’s programs are all aligned with the National Science standards, as well as science standards for Alabama, Georgia and Tennessee. When schools don’t have the money, the field trips are denied. The bottom line is the bottom line, regardless of studies showing the importance of learning experiences outside the classroom.

In 2009, the Tennessee Aquarium began a project called Connecting Tennessee to the World Ocean that was funded by a three-year grant from NOAA (National Oceanic and Atmospheric Association). This project enabled us to provide free visits to the Aquarium and IMAX® Theater for Title 1 schools with additional funding to reimburse bus transportation costs. By September of 2012, more than 65,000 students will have taken a field trip to the Tennessee Aquarium with money provided by this grant.

NOAA funding made it possible for six field trips from Brookwood Elementary in Dalton, Ga. As a result, all 600 students were able to have a rich experience that wouldn’t have been possible otherwise. “This type of personal encounter increases the level of concern children have for protecting wildlife and the environments in which they live,” said Celeste Martin, assistant principal, Brookwood Elementary. “A field trip of this magnitude has a lasting impact on students’ learning and becomes primarily important in their work.”

Brookwood Elementary students created a video about their experience at the Tennessee Aquarium. To view the video, visit vimeo.com/32034948

To find out more about Ocean Literacy, visit www.coexploration.org/oceanliteracy.
Pre-registration is required for events! Register online at www.tnaqua.org/Events.aspx

### Spring Events Calendar

<table>
<thead>
<tr>
<th>DATE</th>
<th>DAY</th>
<th>TIME</th>
<th>AGES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Sat.</td>
<td>9:30-10:30 a.m.</td>
<td>A &amp; 3-4</td>
<td>Nitty Gritty</td>
<td></td>
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<tr>
<td>5 Mon.</td>
<td>9 a.m.-4:30 p.m.</td>
<td>Adults</td>
<td>Members’ Camp Registration</td>
<td></td>
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<tr>
<td>10 Sat.</td>
<td>10 a.m.-Noon</td>
<td>Adults</td>
<td>Rainbarrel Workshop</td>
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<tr>
<td>11 Sun.</td>
<td>1:30-4 p.m.</td>
<td>A &amp; 6+</td>
<td>Moses, the Harbingers of Spring</td>
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<tr>
<td>17 Sat.</td>
<td>9:30-5 p.m.</td>
<td>Adults</td>
<td>Kayaking on the Hiwassee Refuge</td>
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<tr>
<td>17 Sat.</td>
<td>8:30-10 a.m.</td>
<td>8-12</td>
<td>Amazing Amphibians</td>
<td></td>
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<tr>
<td>18 Sun.</td>
<td>1-3 p.m.</td>
<td>A &amp; 5+</td>
<td>Family Canoe Trip: North Chick</td>
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<tr>
<td>24 Sat.</td>
<td>10 a.m.-Noon</td>
<td>All</td>
<td>Pickert’s Trout Ranch</td>
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<tr>
<td>1 Sun.</td>
<td>1:30-4:30 p.m.</td>
<td>A &amp; 6+</td>
<td>Pigeon Pocket Wildflower Walk</td>
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<tr>
<td>5 Thurs.-Sun.</td>
<td>Adults</td>
<td>Exploring Florida’s Forgotten Coast</td>
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<tr>
<td>7 Sat.</td>
<td>10 a.m.-12:30 p.m.</td>
<td>A &amp; 6+</td>
<td>Old Stone Fort Wildflower Walk</td>
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<tr>
<td>7 Sat.</td>
<td>12:30-2 p.m.</td>
<td>All</td>
<td>Williams Island Family Adventure Cruise</td>
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<tr>
<td>8 Sun.</td>
<td>1:30-4 p.m.</td>
<td>Adults</td>
<td>Horsepound Falls Wildflower Walk</td>
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<tr>
<td>14 Sat.</td>
<td>9:30 a.m.-4 p.m.</td>
<td>A &amp; 14+</td>
<td>Touring Kayak Trip to Sale Creek</td>
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<tr>
<td>14 Sat.</td>
<td>10:30-12:30 p.m.</td>
<td>All</td>
<td>Leapin’ Lizards!</td>
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<tr>
<td>15 Sun.</td>
<td>1-3 p.m.</td>
<td>A &amp; 5+</td>
<td>Family Canoe Trip: South Chick</td>
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<tr>
<td>19 Sat.</td>
<td>9:30-11 a.m.</td>
<td>A &amp; 3+</td>
<td>Butterflies and Blooms</td>
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<tr>
<td>28 Sat.</td>
<td>10 a.m.-Noon</td>
<td>All</td>
<td>Trekking with Tykes at TN RiverGardens</td>
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**River Giants Member Night**

**Friday, April 27 • 6 – 8:30 p.m.**

Be among the first to experience the Aquarium’s newest exhibit, River Giants. The Gulf of Mexico exhibit in River Journey is now an exciting new freshwater display featuring an awesome collection of species legendary in size, from a whipray that can grow to a width of seven feet, to the catfish species that is known to reach Volkswagen size in the wild. Kids can high-five a fun new costumed character, and will learn about river giants with activities, a critter craft and enjoy our animal encounters in Ranger Rick. We hope you will enjoy experiencing our “giant” changes, with experts on hand to talk about what’s new.

**All Ages • Free/Members & Non-Member guests using Member Night guest Passes (Limit: one guest per pass) Additional non-member guests: $12.50/Adult; $7.50/Child — NOTE: Please check in at our ticketing center on the plaza…look for the blue awnings with yellow fish!**

**Riverwatch Events** is printed on 100% post-consumer recycled paper.

**Official sponsor of the Tennessee Aquarium Membership Program.**

Note: All events are held on Eastern Time

**MEMBER NIGHTS**

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**Enjoy a meal at Big River Grille or BlueWater Grille before or after your Aquarium event. Present your Tennessee Aquarium membership card when you order to receive a discount.**

**Renew your Membership — anytime! Visit www.tnaqua.org/Membership.aspx**
Join us as we use all five of our senses for a week of animal adventures and exploration through games, crafts, live animal encounters and more!

9 a.m. - 12:30 p.m. • Monday - Friday

Sessions 1-9

$85/Member; $110/Non-Member
(Children must be potty-trained)

Explore the world of animals with live animal encounters, cool crafts, fun activities and field trips to the Chattanooga Arboretum & Nature Center.

9 a.m. - 4 p.m. • Monday - Friday

Sessions 1-8

$160/Member; $215/Non-member
(Children must have attended Kindergarten)

Downtown or down the creek, this Aquarium and Chattanooga Arboretum & Nature Center camp partnership provides fun for water-loving campers with games, hiking, animal encounters, canoeing and Mud Day. Campers are dropped off and picked up at the Nature Center.

8:30 a.m. - 3:30 p.m. • Monday - Friday

Sessions 1, 2 & 5

$160/Member; $215/Non-member

Get ready for indoor and outdoor fun as you learn about native wildlife and their relatives around the world with tours, games, crafts, stream time and a canoe trip at the Chattanooga Arboretum & Nature Center!

9 a.m. - 4 p.m. • Monday - Friday

Sessions 1-8

$160/Member; $215/Non-member

Leap into fun as we discover the amazing world around us. Explore the Aquarium, visit with animals and their caretakers, hike, paddle, sleep overnight alongside “river giants” and go spelunking.

9 a.m. - 4 p.m. • Monday - Friday

with Thursday overnight Sessions 1 & 3-8

$215/Member; $270/Non-member

Go on an aquatic adventure at the Tennessee Aquarium, make a splash in a mountain creek, “learn the ropes” on a challenge course, make waves at a water park and spend the night in the Undersea Cavern.

9 a.m. - 4 p.m. • Monday - Friday

with Thursday overnight Sessions 3, 4, 6, 7 & 8

$215/Member; $270/Non-member

Participate in a week of outdoor adventures including hiking, snorkeling, whitewater rafting, mountain biking and team building plus a two-night stay at the Nantahala Outdoor Center in Bryson City, NC.

9 a.m. - 4 p.m. • Monday - Friday

with Wednesday & Thursday overnights Session 8

$490/Member; $545/Non-member

Must have a minimum of 12 campers registered

www.tnaqua.org/Education/SummerCamp.aspx
**FUN FOR KIDS**

**Nitty Gritty**
*Saturday, March 3 • 9:30-10:30 a.m.*

Take a close-up look at the little animals in your backyard that do a ton of work. We will dissect a weathered log to see what is living in it and find out why. Round out the fun with a delicious snack (no worries, it’s not from inside the log!). Please advise us of any known food allergies.

Ages 3-4, accompanied by an adult • Limited to 15, Minimum 5 (please register child only)  
$8/Members; $13/Non-Member  
River Journey, Delta Swamp Classroom

**Amazing Amphibians**
*Saturday, March 17 • 8:30-10 a.m.*

What makes them so incredible? Close-up personal encounters and interesting activities will help you understand that amphibians are truly amazing. Create a piece of art to help attract a helpful "amphib" into your yard! Please advise us of any known food allergies.

Ages 8-12 • Limited to 15, Minimum 5 (please register child only)  
$8/Members; $13/Non-Member  
River Journey, Delta Swamp Classroom

**Leapin’ Lizards!**
*Saturday, April 14 • 10:30 a.m-Noon*

Although some animals seem to be flying, they are really just falling with style! Lizards, squirrels and frogs all greet the arrival of spring with springing action of their own. Come and meet them, learn about them and make your own jumping toy. Please advise us of any known food allergies.

Ages 5-7 • Limited to 15, Minimum 5  
$8/Members; $13/Non-Member  
River Journey, Delta Swamp Classroom

**Butterflies & Blooms**
*Saturday, April 28 • 9:30 - 11 a.m*

Surround yourself with beauty this spring! Help Aquarium staff release exotic butterflies in the Butterfly Garden. Discover what certain butterflies eat as adults and as caterpillars. After watching them feed in the Aquarium Butterfly Garden, we will plant flowers to attract native butterflies to your own backyard! Please advise us of any known food allergies.

Families with children ages 3 and up • Limited to 15, Minimum 5 (please register child only)  
$8/Members; $20/Non-Member • Butterfly Garden, Ocean Journey and Delta Swamp Classroom

**Super Snakes**
*Saturday, May 19 • 10 – 11 a.m.*

Scary, mean and dangerous are often used to describe snakes, but words can be very misleading. We will have lots of fun exploring the amazing lives of our legless friends! Discover what they eat, how they move, how they begin life while noticing their interesting colors and patterns as we meet several up close. You will even get to touch them to see how they feel if you like. Then make your very own snake to take home! Please advise us of any known food allergies.

Ages 2-3, accompanied by an adult • Limited to 15, Minimum 5 (please register child only)  
$8/Members; $13/Non-Member • River Journey, Delta Swamp Classroom

**Rain Barrel Workshop**
*Saturday, March 10 • 10 a.m. - Noon*

A rain barrel collects water from gutters and stores it for future uses like watering plants and washing cars, especially during periods of drought. Go green and convert an empty 55-gallon Coca-Cola syrup drum into a working rain barrel by attaching connectors during the program with the help of experts from Ace Hardware. Learn how to install your rain barrel onto a downsout at home and the importance of practicing water conservation. Includes a pre-drilled barrel and a kit with hose adapters, spigot and basket for trapping debris. Bring a vehicle to accommodate a 55-gallon (39-40” tall x 76” round) rain barrel.

Adults • Limited to 20 • $25/Member; $30/Non-Member  
Location: IMAX Center Classrooms

**Hanging Basket Gardens**
*Thursday, May 10 • 6 – 8 p.m*

Join Aquarium lead horticulturist Christine Bock at The Barn Nursery to create a beautiful hanging basket for sun or shade. Plant a 12-inch coco-lined hanging basket to attract butterflies and hummingbirds with lantana and petunias for sun baskets, fuchsia and impatiens for shade, plus a 6-pack of additional flowering plants. Talented designers from The Barn Nursery will help you pot an attractive hanging basket to proudly display. Then they’ll send you home with fertilizer and information to keep it looking great.

Adults • Limited to 15 • $25/Member; $35/Non-Member

**Picture the Aquarium Workshop**
*Photography with Tom and Pat Cory  
Thursday, June 7 • 6 – 9 p.m*

Capture stunning images of marine life, fabulous penguins, jellyfish, tropical butterflies and new river giants. Begin with a short clinic before photographing in both Aquarium buildings with hands-on advice by professional nature photographers Tom and Pat Cory. Digital or traditional cameras or camcorders are welcome.

Adults • Limited to 20 • $30/Member; $45/Non-Member

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**WORKSHOPS**

**Rain Barrel Workshop**
*Presented by ACE Hardware*

**Hanging Basket Gardens**
*Presented by The Barn Nursery*

**Picture the Aquarium Workshop**
*Presented by Ace Hardware*
Kayaking Day Trip
On the Hiwassee Wildlife Refuge
Saturday, March 17 • 9:30 a.m. – 5 p.m.

Discover migrating birds and other wildlife with Kevin Calhoon during our scenic spring paddle along the Hiwassee Wildlife Refuge which is a favorite feeding area for many herons, kingfishers and ospreys. Includes gear, transportation from Greenway farm and guides. Please pack a lunch, water bottle and extra dry clothes.

Family Canoe Trips
North Chickamauga Creek
Sunday, March 18 and May 6 • 1 - 3 p.m.

Get up close and personal with creek critters as you float the pastoral waters of the North Chickamauga Creek in canoes. Then paddle into the faster current of the Tennessee River. All equipment and transport are provided. Please bring your own drink and lunch if desired. Meet at Greenway Farm.

Touring Kayak Trip to Sale Creek
Saturday, April 14 • 9:30 a.m. - 4 p.m.

Kayak on the calm, meandering waters of Sale Creek near Dayton, Tn while viewing birds, basking turtles and other spring wildlife along the way. Includes gear, transportation and guides. Please BYO picnic lunch, snacks and water and dress appropriately for the weather.

Women on the Water (WOW)
South Chickamauga Creek
Thursday, May 3 • 6 - 8 p.m.

Ladies! Slip on a pair of water sandals and paddle with us on a laid-back adventure exploring a wildlife-filled section of the South Chickamauga Creek at dusk. We’ll put in at the NEW Sterchi Farm greenway access. All equipment is provided, including an expert female guide. Meet at Sterchi Farm Greenway. Includes all equipment; BYO drink, snack or picnic dinner if desired.

Chickamauga Dam Lock Paddle and Touring Kayak Clinic Combo
Saturday, May 5 and May 19 • 1 - 5 p.m.

Kayak on the peaceful North Chickamauga Creek to the confluence of the Tennessee River. Then, the real adventure begins as you lock up through the Chickamauga dam to the lake. During the trip, instructors will cover various aspects of flat water kayaking including paddling safety and rescue techniques. Includes all equipment and guides. BYO lunch or snack and water bottle.

REGISTER NOW online at www.tnaqua.org/Events.aspx or mail form on page 16 or call 423-267-FISH (3474).
Trekking with Tykes
Backyard Safari

Saturday, April 28 • 10 a.m. - Noon

Be Out There! Explore the wonders of nature with your little ones on a guided backyard safari. Join us at the Tennessee River Gardens, a private nature reserve known for its wildflowers, native butterfly conservatory and beautiful riverside trails. Bring your own snack or lunch and a drink. Pre-registration is required.

Parents and young children • Limited to 20, Minimum 5 • Free/Member; $5/Non-Member

Spring Family Sleep in the Deep

Friday, May 11 • 5:30 p.m. -
Saturday, May 12 • 8:30 a.m.

Discover some of our darling, newly born babies and celebrate motherhood during this Spring Sleep in the Deep. You will explore behind the scenes, get up-close with our critters, see an IMAX® movie and encounter otherwise shy animals that come out after the sun sets. At lights out, bed down next to the new River Giants exhibit in River Journey, while rays, catfish and barramundi keep you company. Includes overnight, IMAX movie, guided tours, special activities, pizza and continental breakfast.

Families with children ages 6 and older accompanied by an adult $50/Member; $60/Non-Member; add a souvenir patch for $3.50 Limited to 40, Minimum 30

Williams Island Adventure Cruise for the Whole Family

Saturday, April 7 • 12:30 – 2 p.m.

Zoom downriver on the River Gorge Explorer for a Williams Island Adventure, a 90-minute cruise tailor-made for the young and young at heart! Learn about the life of native animals and Native Americans that once lived on the island with fun activities and an on-board scavenger hunt. Keep your eyes peeled for possible sightings and signs of osprey, bald eagles, deer, muskrats, kingfishers, vultures, bobcats, coyotes, turtles and otters as we leisurely circle historic Williams Island with an Aquarium naturalist. Experience a live native animal encounter and take home a nature coloring book for more fun.

All Ages • Limited to 68 • $20/Per Person (Ages 3 and older) $18/Per Person under the age of 3

18th Annual Tennessee Aquarium Kids Fish ‘n’ Fun Derby

In collaboration with Tennessee Wildlife Resources Agency
Saturday, May 19 • 8:30 a.m. – Noon, EST

Get hooked on family fishing! Pros with the Outdoor Adventures Network (www.MyOAN.net.) will help children learn about fish habitat, behavior and equipment. Then fish with volunteers from the Chattanooga BASS Club who will teach kids to cast, tie knots, bait hooks and reel them in using catch and release techniques. Young anglers may compete in a Casting Kids event and could advance to regional competition. Youngsters can win great prizes and will earn a certificate of accomplishment. NOTE: Anyone over age 12 must have a fishing license.

Ages 6-14 (Accompanied by an adult) Free/Camp Jordan Park & Pond adjacent to the Arena

REGISTER NOW online at www.tnaqua.org/Events.aspx or mail form on page 16 or call 423-267-FISH (3474).
SPECIAL EVENTS

Costa Rican Dinner
At 212 Market Restaurant
Thursday, April 19 • 6:30 – 8 p.m
Celebrate Earth Day week global-style featuring cuisine from Costa Rica, which is where we acquire many of the chrysalises for our tropical Butterfly Garden. Enjoy an authentic dinner adapted by 212 chefs using the family recipes of our special Costa Rican guest Gabriela Halfin who will share memories of home. Begin with ceviche, a popular coastal dish made with fresh shrimp and fish marinated in citrus juices, special seasonings and cilantro. Our entrée features savory roasted spring pork served with a delicious sauce, yams and grilled new zucchini. Finish with tres leches cake, the “Tico” national dessert.

Includes cooking demonstration, dinner, one glass of house wine, tax and gratuity.

Adults • Limited to 35 • $35/Member; $40/Non-Member

Civil War Battles and Birds on Stringer’s Ridge
With Jim Ogden and Kevin Calhoun
Saturday, April 21 • 9 a.m. – Noon
Join us to learn about the first Civil War battle in our area 150 years ago this spring, the bombardment of Chattanooga by Union troops from the hills of Stringer’s Ridge in 1862. This action shows Chattanooga’s growing importance as the “Gateway to the Deep South,” as two contending armies struggle for control of the region’s mountains, ridges and gaps. For thousands of years, the thermal uplift generated by these same features has produced one of the most significant avian migration corridors in the East. During this unique walk, Civil War Historian Jim Ogden will bring the historical points of interest to life as Tennessee Aquarium Assistant Curator of Forests Kevin Calhoon identifies spring songbirds and any raptors soaring overhead. Bring binoculars if possible!

All Ages • Limited to 50 • $5/Member; $10/Non-Member • Rod Rental: $2 per hour or bring your own Trout: $3.75 per pound live weight (there is no catch and release) • Trout Fillets: add $0.75 per fish

Sensational Seafood Dinner at Table 2
Thursday, April 5 • 6:30-9 p.m.
Join Chef Eric Taslimi for an exclusive dining experience at Suite 300, Table 2’s private penthouse that features an elegant Mediterranean ambiance. Sip on a complimentary glass of wine as you watch a cooking demonstration by the chef before dining on a multi-course dinner that highlights sustainably harvested U.S. seafood and fresh local produce. This all-inclusive event includes a cooking demonstration, dinner, one glass of wine & gratuity.

Adults • Limited to 25 • $45/Member; $55/Non-Member

Shop, Select and Savor Seafood
With the Chef at Greenlife Grocery
Thursday, May 17 • 6 – 8 p.m.
Take the mystery out of how to be a sustainable seafood shopper and how to prepare a whole rainbow trout at Greenlife Grocery. Join an Aquarium expert for a delicious evening of education with a three-course dinner prepared by executive chef Charlie Loomis, with wine pairings from The Vine. Learn how to decipher a grocery label at the fish counter to best select a sustainably caught fish while learning how your choices can make a difference. Watch a Greenlife expert demonstrate easy techniques for preparing a whole fresh trout before enjoying dinner and a cooking demonstration by Chef Loomis. Leave with recipes and the knowledge of some of the challenges our oceans face because of the overharvesting of fish.

Adults • Limited to 25 • $30/Member; $40/Non-Member

Serve & Protect is the Aquarium’s sustainable seafood initiative that promotes responsible seafood choices that maintain the health of our ocean. Please join us at these fun events with our partners.

REGISTER NOW online at www.tnaqua.org/Events.aspx or mail form on page 16 or call 423-267-FISH (3474).
TRAVEL ADVENTURES
Contact Betty Miles for a trip brochure: ebm@tnqua.org or 423-785-3008

Mongolia: Land of the Blue Sky
August 27 – Sept. 7, 2012
If you treasure exploring unspoiled and less-traveled places and learning from the diverse and wondrous cultures of the world, Mongolia is for you. Explore cosmopolitan Ulaanbaatar before venturing into “Outer Mongolia” staying in authentic felt-lined Gers, the Mongolian equivalent of African tented camps. Our journey takes us from the vast rolling grasslands of the steppe and forested mountains of the north, south to the shifting sand dunes and stunning landscapes of the arid Gobi Desert.

Exploring Florida’s Forgotten Coast
April 5 – 8, 2012
Florida’s Apalachicola Bay and St. George Sound have some of the most pristine beaches, biodiverse wetlands and bountiful waters found along the Gulf Coast. This little known paradise is the perfect place to see and understand the ecology of Gulf Coast habitats without the effects of overdevelopment. Explore tidal beaches for marine life, search for migratory birds and feast on sustainable seafood with two Aquarium experts — Assistant Curator of Forests Kevin Calhoon and Environmental Educator Jennifer Latour. You’ll visit diverse coastal ecosystems to observe the natural connections of wildlife in each unique habitat.

WILDFLOWER WALKS
Guided by Aquarium lead horticulturist Christine Bock
Adults and children 6 and older accompanied by an adult
Limited to 15 per walk
$8/Member; $13/Non-Member per walk per person

Mosses, the Harbingers of Spring
Sunday, March 11 • 1:30 – 4 p.m.
Our experts will lead you on a discovery hike at Cloudland Canyon State Park to look for signs of spring. You’ll discover early spring flowers and mosses, the seldom-noticed species of the natural world. Found in wet outcrops and seeps, mosses are often associated with leprechauns, a thought not too far afield, since these fascinating bryophytes form a tiny world often hidden among larger plants.

Wildflower Walk to Pigeon Pocket
Sunday, April 1 • 1:30 – 4:30 p.m. Eastern Time
Join Christine Bock on a walk through this protected area at the base of Pigeon Mountain near Chickamauga, Ga. It’s one of the richest wildflower walks around with bluebells blooming alongside of yellow wood poppy and many species of trillium. Traverse a raised walkway beside a steep slope covered with trout lilies. The trail follows a creek bed that ends at a waterfall. (Level walk except for optional walk up a moderate slope to the top of the waterfall; no public restroom facilities).

Old Stone Fort Wildflower Walk
Saturday, April 7 • 10 a.m.- 12:30 p.m.
Join author Jack Carman while exploring woodland trails that encircle this 2,000 year old American Indian ceremonial site in Manchester, Tn. See more than 80 species of spring wildflowers including a large bed of bluebells as you walk along the Duck River and numerous waterfalls. (Moderate walk on woodland trails)

Horsepound Falls Wildflower Walk, Palmer, Tenn.
Sunday, April 8 • 1:30 – 4:30 p.m.
Join Christine Bock to discover an outstanding display of rarely seen wildflowers, such as dwarf ginseng, southern red trillium and Dutchman’s breeches at Savage Gulf State Natural Area. This hike dips into a gorge, Collins Gulf, crosses a creek and continues to Horsepound Falls. Pack a small towel and shoes that can get wet for a creek crossing. (Sustentious — 5 mile hike with an uphill at the end)

Renew your Membership — anytime! Visit www.tnaqua.org/Membership.aspx
Registration is required for all programs with payment in full.

**ONLINE:**
www.tnaqua.org/Events.aspx

**PHONE:** 423-267-FISH (3474) or 800-262-0695, ext. 3400, 8:30 a.m. - 4:45 p.m. weekdays. Please have event and credit card information ready.

**PAYMENT** is required by credit card, cash or check when registering.

**CONFIRMATION** with event details will be mailed upon receipt of event fees.

**CANCELLATIONS/REFUND:** We cannot provide refunds for no-shows. Unless noted differently, cancellations must be received no less than two weeks prior to event date for a refund. A full refund is made if the Aquarium cancels an event or if an event is full.

**Let’s Stay in Touch**
Do you have your current email address? If you would like to stay on top of the latest Aquarium news, get notifications on new events, receive personalized membership updates and timely renewal reminders, register for our new online community at: www.tnaqua.org/membership.aspx.

**Go Green!**
*Riverwatch* is also an electronic magazine with the same great articles, vivid photos, and listings of fun-filled events as the print version. You can now receive your full-color *Riverwatch*, enhanced with interactive features, delivered directly to your inbox. It’s a great way to be “green” and support the environment. Visit www.tnaqua.org/membership/riverwatch.aspx to sign up today. And remember, you can also renew your membership online anytime and continue to receive the great benefits of unlimited admission, exclusive discounts, and more without interruption. Visit www.tnaqua.org to renew — it’s fast, convenient and paperless!

**Join us on Facebook, Twitter and Flickr**
Not only can you join in the conversation, you’ll be surprised by some of the things that don’t make the pages of *Riverwatch*.
Hey Kids! In each Riverwatch issue, look for fun activities in this section. Collect the Tennessee Aquarium’s Animal Trading Cards, send us your own Animal Art or Silly Animal Jokes and Riddles, and ask us your “How Do They Do That” questions. Send all submissions (along with your name & age) to jal@tnaqua.org.

CONTENT FOR “GETTING OUR FEET WET” PROVIDED BY THE TENNESSEE AQUARIUM EDUCATION DEPARTMENT

ANIMAL ADAPTATIONS CROSSWORD PUZZLE

THAT MAKES SENSE! Read the article on page 3 to fill in the blanks below and solve the crossword puzzle.

ACROSS
2. Our five ___ connect us and animals to our world.
4. To learn more about what goes on behind-the-scenes take a ___ Pass tour.
5. Snakes use their tongues and ___ organs to “smell.”
9. Snakes “hear” by sensing ___.
10. A special spring program called ___ Kids lets kids learn more about animal care behind the scenes.
11. To be a good animal caretaker, a person must pay attention to ___.
12. Jellies rely on their sense of ___ for practically everything.

DOWN
1. Fish’s and amphibian’s ___ ___ sense movement in the water.
3. We feed the ___ three big meals each week so that they won’t eat their neighbors.
6. It is very unhealthy for an animal to be ___.
7. Mammals often depend upon ___ to find their food.
8. Color of food is important to birds who usually find it by ___.
Tennessee Aquarium  I601

American Lobster  
Homarus americanus

- **Habitat** — Benthic dwellers found on the bottom of rocky and muddy ocean shores. American lobsters are located only along the Atlantic coast and offshore, from North Carolina to Canada.
- **Diet** — Larvae are carnivorous zooplankton eaters. Adults are omnivorous, eating polychaete worms, mollusks, crabs, sea urchins, sea stars & seaweed/macroalgae.
- **Size** — Known to grow up to three feet long and weigh more than 40 pounds!

**WOW!**
A 100g serving of American lobster has only 90 calories, yet it is high in protein: 18.8 grams’ worth!

**American lobsters can be seen in the Boneless Beauties exhibit on Level 2 of Ocean Journey.**

Tennessee Aquarium  F929

Yellowtail Snapper  
Ocyurus chrysurus

- **Habitat** — Juveniles hide out in seagrass beds while adults live near deep reefs. They are found in the western Atlantic Ocean along the North American coast as far north as Massachusetts, as well as in the Gulf of Mexico and Caribbean Sea as far south as Brazil.
- **Diet** — Adults feed on invertebrates including crabs, shrimp and worms, as well as smaller fish. Juveniles feed on plankton.
- **Size** — The average size of an adult yellowtail snapper is 34 inches long.

**WOW!**
The yellowtail snapper is not listed as endangered or vulnerable with the World Conservation Union and is a good sustainable seafood choice.

**The yellowtail snapper can be found in the Secret Reef exhibit on Level 2 of Ocean Journey.**

Tennessee Aquarium  F128

Foxface  
Siganus vulpinus

- **Habitat** — Lives around coral reefs throughout the western Pacific.
- **Diet** — These omnivores mostly eat algae but will also eat some corals as well.
- **Size** — The average size of an adult foxface is nine inches long.

**WOW!**
The foxface is a popular home aquarium fish, but be careful! Like all members of the rabbitfish family, foxfaces have venomous spines on their dorsal, pectoral and anal fins. They can deliver a painful sting.

**The foxface can be found in the Live Coral exhibit on Level 2 of Ocean Journey.**

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**SWEET NECTAR BUTTERFLY FEEDER**

**MATERIALS YOU WILL NEED:**
- Reuse a paper or plastic cup
- String
- Gluestick
- Cotton balls
- Tissue paper
- Scissors
- Sugar
- Water

**DIRECTIONS:**
1. Take the cup and punch a small hole in the bottom. Push a cotton ball or two tightly into the hole.
2. Cut out flower petal shapes and glue them to the bottom of the cup.
3. Punch holes on each side of the cup and tie on enough string to hang it from a branch in your garden.
4. Mix about a tsp of sugar into a cup of boiling water and let it cool (you can have your parents do this for you).
5. Fill the flower cup about ¼ full with the sugar water and hang it in your garden. (Do this outside, it may drip a little)
6. Watch the feeder...soon butterflies will come to get a sweet sip!

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**SENSES**

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**BEHAVIOR**

**ANSWERS TO THE ANIMAL ADAPTATIONS CROSSWORD PUZZLE ON PAGE 17**

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**What do you get when you cross a parrot with a shark?**

An animal that will talk your head off!
Generations of Discovery

By Andree Herbert, development manager

When Signal Mountain residents DeWayne and Marilyn McCamish signed on as some of the first patron members of the Tennessee Aquarium, they did so with the belief that it presented enormous potential for the community. DeWayne had grown up in Chattanooga and had fond memories of nights out in the city. But in 1992, he couldn’t fathom his teenage daughter wanting to spend time downtown. “Chattanooga wasn’t as nice as it is now, that’s for sure,” laughs Marilyn.

Their daughter soon discovered that the Aquarium indeed helped to provide plenty of downtown fun. Recalling the Aquarium as a date night destination before she was married, Kristin and her husband, Matt Bell, now spend most of their time at the Aquarium with their two young boys, Luke and James.

The three generations of Aquarium members appreciate the family bonding that is fostered in each Aquarium visit. “As a grandfather, it has given me the opportunity to bring the children down and have something to do,” says DeWayne. “We could go up to see the penguins dozens of times and it never gets old.” Matt echoes these thoughts, saying, “I bring my family when they’re here from out of town. It’s a different experience every time you come.”

The McCamish family has also discovered many ways the Aquarium broadens their global view. “The Aquarium provides a slice of the world that we would never otherwise see,” says Matt. From summer camp experiences to interactive exhibits, they note that the learning opportunities for their children are incredible. “As a parent, I’m unlikely to pick up a book to read to them about sturgeon,” he says, “but here they get to discover it first-hand.”

The family’s relationship with the Aquarium has certainly evolved over the last 20 years, but they have discovered its role as an essential community asset remains unchanged. “We’re choosy about who we support — and we definitely want to support the community in Chattanooga,” says Kristin. “I feel like this is a way that benefits us as a family, so it’s not a hard thing to give to. But we definitely see the greater picture here of what it is doing for our city.”

“It would be hard to imagine our city without this place,” DeWayne said. “And if we don’t support things then they’re not going to be here. So this is a focal point, and it’s the point which now the city has developed around. This is where it all started and this is where it still is.”

THANK YOU...

As a nonprofit organization, the Tennessee Aquarium relies on your support to make a meaningful difference in the economic and environmental well-being of our community. Individuals like you help provide exceptional care for our living collections, maintain our state-of-the-art exhibits, and carry out vital education and conservation programs. Discover how your tax-deductible contribution can help today at www.tnaqua.org/contributions.
20th Anniversary Memories

Time flies when you’re having fun, and believe it or not, the Tennessee Aquarium will celebrate 20 wonderful years on the Chattanooga Riverfront in May. Looking back, we’re reminded of the amazing community spirit that brought us together to turn a vision into reality. Looking ahead, we’re working on a new wave of energy and support to make the next 20 years just as exciting and meaningful as our first 20.

We’d love to hear from you. Send us your Aquarium stories and favorite photos to webmaster@tnaqua.org. Were you among the very first guests on opening day? Was your first visit with a school group, or as a teacher or chaperone? We’d also enjoy hearing from anyone who first visited as a child and now brings their own children to visit. Grandparents, feel free to brag on your visits with both generations. (Bonus points for then and now pictures.) We’ll share them on our website, in Riverwatch and with our Facebook friends. Join the celebration!

Made in the U.S.A.

The Aquarium’s retail staff is constantly searching for items for our gift shops that are manufactured in the United States. At each location you’ll now see signage that prominently indicates which products are “Made in the USA.” Choose from books, puzzles, games, cookware, totes, some of our Tennessee Aquarium souvenir products, even original work by American artists — our penguins!

Our online shop also features a gift category specifically for items “Made in the USA.” Shop online at: store.shopaquarium.org. To receive your membership discount, use the online code: AMERICA.

Party for the Planet 2012

The Aquarium invites you to our Party for the Planet on Saturday, April 21st from 11 am until 4 pm. There will be a festive atmosphere on the Aquarium Plaza with lively music, fun conservation crafts and games that will help your family discover how to care for our earth. Chattanooga area conservation organizations will offer information and fun, hands-on activities. Parents may discover new ways to save on energy bills and protect precious water resources, while kids will enjoy planting a seed and learning how to attract wildlife to your backyard.

Special programs in Ranger Rick’s Backyard Safari and keeper talks throughout both buildings will keep visitors entertained and engaged. The Chattanooga Boys Choir will give a special Earth Day performance of “Songs for the Earth” in the River Journey Auditorium at 11 a.m. and 1 p.m. This musical medley will inspire you to care for planet Earth. All Party for the Planet activities are free with Aquarium admission.
Meet the New GPOs

Two new female giant Pacific octopuses can be seen hanging around in their new digs in the Boneless Beauties gallery. Minerva and Medusa hail from the Pacific northwest and came to the aquarium in April of 2011. Before going on exhibit, they were held in the River Journey quarantine room. And according to Carol Haley, the Aquarium’s assistant curator of fishes, this location might have helped one of the cephalopods become a real star.

“Due to the popularity of our afternoon Backstage Pass, Minerva quickly overcame her shyness and seems to really enjoy viewing guests as they come by her tank,” said Haley. “Medusa enjoys her favorite food, soft shell crab, tucked inside a peanut butter jar or a Mr. Potato Head toy. Minerva is a bit pickier. She prefers capelin inside of a plastic Easter egg.”
When you live in a land with very little water, you become acutely aware of its importance.

“Arizona has a lot of desert canyons with creeks,” said Dr. Zeb Hogan, director of National Geographic’s Megafishes Project. “As a kid, that’s where I’d go camping with my family. It’s so hot and dry in Arizona, I grew up with a real appreciation of water.”

Soon Hogan’s youthful interest in water turned into a lifelong pursuit to learn about, and protect, freshwater fish. “I spent two summers as an undergrad at the University of Arizona working at the bottom of the Grand Canyon doing native fish surveys on the Colorado River and its tributaries,” said Hogan. “Because of the influence of Glen Canyon Dam, the native fish were not doing very well in that stretch of the river.”

Later when he traveled to Thailand, Hogan became interested in applying some of his experiences working on the Colorado to the migratory species of the Mekong River. It turned out to be his first introduction to river giants. “When I started looking into migratory catfish I realized, ‘Holy Moly!’ These are some of the largest fish in the world.” Huge freshwater species like the Mekong catfish can reach ten feet in length.

Hogan was hooked. These monstrous fish not only reached legendary proportions — at least 6.5 feet in length or 220 pounds in weight — their ecological stories were pretty mysterious and more importantly, they were slipping out of sight. Many were vanishing almost before they could be documented. “Each one of these species is impressive for its own reasons,” Hogan said. “For example the freshwater eel in New Zealand can live more than 100 years. They make these epic migrations from the ocean into rivers where they spend most of
their lives in freshwater. Then at the end of their long lives, they make another 3,000-mile migration back out into the open ocean to spawn, then die.”

In 2007, National Geographic launched the Megafishes Project, a multi-year effort to protect the world’s remaining stocks of giant freshwater fish species. At the same time, organizers hoped to focus attention on the plight of the world’s rivers. As Megafishes director, Hogan began a global quest to chase down legendary fish stories. He wanted to establish facts, sort out fiction and hopefully find solutions to challenges facing the fish and their waters. The project quickly became the subject of a popular television show on the National Geographic channel.

“The premise of ‘Monster Fish,’ is the search for the largest freshwater fish to find true life Loch Ness monsters and learn about their ecology and population status before it’s too late,” said Hogan. “In 2005 we documented the world’s largest freshwater fish — a 646-pound Mekong River giant catfish caught in Thailand. We also tagged what we think may have been one of the largest freshwater stingrays ever documented.” That ray had a 12-foot diameter, but proved too large to weigh.

“Monster Fish” fans have seen Hogan on television with ‘Terror Trout,’ ‘Alien Catfish,’ and ‘Ancient Beasts’ like paddlefish. Tennessee Aquarium guests will soon be able to get up close to some of these massive freshwater fish when the new River Giants exhibit opens this May in the River Journey building. Among the species visitors will see on exhibit will be Australian freshwater eels, pangasius catfish, arapaima and whiptail rays. “I’ve spent a lot of time looking for these guys,” said Hogan. “In the Mekong River, and in Australia, there are stories of huge rays up to 20 and maybe even 30 feet in length. Our research also found some scientific papers that had records of these rays getting up to around 1,000 pounds. So these rays may be the world’s largest freshwater species.”

While the Aquarium’s rays won’t achieve such extreme proportions, they will be an impressive sight among a wonderful collection of species in the new River Giants exhibit. “It’s pretty easy to love, and to be curious about, these fish,” said Hogan. “They are hard to find in the wild and most of them occur in very remote parts of the world. The River Giants exhibit is great because, while most of us are not going to have a chance to come face-to-face with a giant catfish or freshwater rays in the wild, we’re afforded that opportunity by going to the Tennessee Aquarium.”

Hogan will be in Chattanooga to help introduce everyone to these mysterious mega-fish when the exhibit opens. While he’s here, he’ll also help highlight the tenuous situations these fish are facing and why everyone has a stake in their futures. “In the Mekong basin, it’s not that difficult to make a compelling argument that fish are important because there are 60 million people in that region who get most of their protein from fish,” Hogan said. “In the Great Lakes region there is a multi-billion dollar recreational fishery. The large fish in particular are indicators of both the health of the fisheries and the health of the rivers or lakes. Unfortunately, most of them are also facing extinction in our lifetime.”

But Hogan is hopeful for the future of giant freshwater fish. He points to the Aquarium’s Saving the Sturgeon project as a proof that nature can be helped. “The work that the Aquarium is doing with its partners is very important because we need success stories. People need to see that it is possible to protect and restore the big fish that remain.”

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**SAVE THE DATE:** Member’s Sneak Preview of River Giants is on Friday, April 27th

See the new exhibit and then meet Dr. Zeb Hogan.

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Discover ways to support Tennessee Valley conservation at www.tnaqua.org