The Delta Swamp reopens with the all new

ALLIGATOR BAYOU

SPRING BREAK FUN FOR KIDS 5
2015 SUMMER CAMPS 6
SPRING EVENTS 8
TNACI FIELD NOTES 10
IMAX® 3D FILMS 12
One dozen alligators, with coal-black eyes, will silently patrol the waters in front of a Cajun shack in the new Alligator Bayou exhibit. It may be a chilling scene for many, but Dave Collins believes guests will come away with a new appreciation for these animals after viewing this gator-filled swamp. “There are many layers to an alligator’s personality,” says Collins, the Aquarium’s curator of forests. “Most people think of them as aggressive animals, but they have a strong maternal side which seems like a contradiction. They carefully tend to their young for long periods of time with a lot of communication between the mother and young.”

American Alligators, like those you’ll meet at the Aquarium, use vocalizations, headslaps, jaw claps, vibrations and even something called subaudible vibrations to stake out territory, find a mate, or simply to say, “Hey—I’m over here!”

These complex behaviors help reveal something about the reptilian brain behind the gator’s steely gaze. “They are intelligent animals,” said Collins. “Like the sharks in the Secret Reef, we have target-trained the alligators to feed in different areas. This helps the gators become accustomed to one another and gives them a strong sense of where their food is located so they are not in a continual foraging mode.”

So even though this pool will look menacing, the waters should be pretty peaceful. Groups of mid-sized alligators don’t display as much territorial behavior when they are raised together. “With multiple animals, the individuals are more accepting of the others,” said Collins. “Two or three would definitely stake out territories.”

Like most reptiles, gators have indeterminate growth. “Given adequate resources and opportunities to survive, these animals are long-lived and will continue to grow,” said Collins. “Historically, American Alligators grew to lengths of more than 15 feet.” But,
due to overhunting that virtually decimated gators in the United States prior to protection measures, huge individuals are rare in the wild today.

Because members can visit anytime throughout the year, you may be more likely to see an Aquarium herpetologist step out of the Cajun shack from time to time. New gator programs will give everyone a chance to learn more about these ancient-looking creatures and perhaps see them chomp on a snack or two.

Visitors will also learn more about our cultural connections to wetlands. “In addition to being home to awe-inspiring animals like alligators, southern wetlands and bayous have always been tremendously rich environments for hunters and fishermen, filled with

---

**Alligators have something in common with...**

**SHARKS:** Alligators have 75 to 80 teeth at any given time. As they wear down, they are replaced. One alligator may replace all of its teeth up to 50 times! That’s as many as 4,000 teeth during its lifetime.*

**BIRDS AND MAMMALS:** Most reptiles have three-chambered hearts, but the heart of alligators—and all crocodilians—has four chambers, a trait shared with mammals and birds.**

**SUNBATHERS:** Alligators are ectothermic. They must rely on external sources of heat to regulate their body temperature. To warm up, they bask in the sun or move into warmer water. Gators prefer summer temperatures and become dormant if temperatures drop to around 55 degrees Fahrenheit.**

*Source: Smithsonian.com “Solving an Alligator Mystery May Help Humans Regrow Lost Teeth”

**Source: Florida Fish and Wildlife Conservation Commission**
fish, crayfish and waterfowl,” said Collins. “And while people have always survived by eating directly from these areas, wetlands also serve larger purposes in nature as nurseries for countless species, as filters between land and sea, and as buffers against tropical storms and hurricanes.”

**New Delta Animal Programs—Something to Crow About**

Meet many other wetland creatures at a new presentation station located just “downstream” from Alligator Bayou. Experts will bring out a variety of animals for scheduled programs each day to give members more opportunities to come in close contact with something special, like a pair of clever crows. “They’re highly intelligent puzzle-solvers,” said Collins. “Crows will watch your actions, figure things out, and then look for something new to challenge their inquisitive personalities.”

This new area is designed with multiple surfaces and room for the animals to move around. It’s the perfect place to observe downy-soft owls or North America’s only marsupial—the Virginia Opossum. “These programs are designed to allow these animals to showcase their natural abilities and unique behaviors,” said Collins. “We hope to reach as many guests as possible each day with meaningful presentations that leave people wanting to come back to learn more.”

**Get a Bird’s Eye View of Alligator Bayou**

Members who add the new Backstage Pass to their visit can travel up above the alligator pool. A new treetop observation deck provides a unique perspective of this wetland habitat. Birds may approach as your Aquarium guide reveals hidden aspects of swamp life as part of your 45-minute behind-the-scenes experience.

**CHOMP or say, “Ahhhhhh!”**

According to researchers at Florida State University, the bite force of a 13-foot American Alligator is more than 2,900 pounds per square inch. However, the muscles that open an alligator’s mouth are relatively weak. So holding the powerful jaws shut is much easier than trying to keep them from biting down.
Beacons allow mobile apps to understand their position on a very fine scale. By using Bluetooth Low Energy technology, data can be transmitted over short distances. The High-Tech Animal Tracker program has been developed by Cloud Beacon, a new technology company in Chattanooga specializing in mobile app development and beacon strategies.

In 1803, John James Audubon tied a thread to a bird’s leg in a simple experiment to try tracking the migration of Eastern Phoebes near his home in Philadelphia. Today’s scientists, like the researchers at the Tennessee Aquarium Conservation Institute, use powerful electronics to monitor the movement of creatures great and small. Almost daily, these biologists make surprising discoveries that both open eyes and raise eyebrows.

So right now it’s an exciting time to be a scientist tracking animals from around the world—whether on land, overhead or under water.

Kids can become High-Tech Animal Trackers at the Aquarium this spring break, trailing some rare, threatened or rarely seen animals with their families. In our mobile optimized adventure, a team of wildlife biologists have “tagged” over a dozen animals and need the help of young citizen scientists to learn more about them. Young Trackers can use a smartphone to find each species as they tour within River Journey and Ocean Journey. Now it’s up to the High-Tech Animal Trackers to seek out, identify and observe them. Completing fun activities helps everyone get to know and appreciate many of the Aquarium’s most fascinating creatures.

Up to the challenge? You can get started in two easy steps:
- Download the FREE Tennessee Aquarium app from Google Play or the iTunes Store.
- Next, enable Bluetooth connectivity and location services in your mobile device settings.

As kids approach the habitats of the tagged animals, they will receive a special message fueling their role in this fun-filled adventure.

The High-Tech Animal Tracker beacons will be powered up on March 12th. Kids will earn a High-Tech Animal Tracker certificate at the end of their expedition.

SPRING BREAK FUN FOR KIDS!

BECOME A HIGH-TECH ANIMAL TRACKER!

JOHN

H

O

BAM

BER

R
TENNESSEE AQUARIUM SUMMER CAMP 2015

TIPS ON REGISTERING YOUR CAMPER:

- Have your current membership & credit card numbers ready when registering.
- Renew your membership now to be ready for early registration!
- Camp activities are developed for specific age groups. Children must be the correct age for the camp they register for during the camp session.
- Spaces are limited! Only register for one week of camp per child.
- A $25 fee will be applied for transfers or cancellations.
- New in 2015! Register online using mobile devices.

MEMBER REGISTRATION BEGINS MONDAY, MARCH 2nd @ 8:30AM
NON-MEMBER REGISTRATION BEGINS ON MONDAY, MARCH 9th @ 8:30AM

REGISTER ONLINE AT:
TNAQUA.ORG/SUMMER-CAMP

Support is available: summercamp@tnaquarium.org or (423) 785-4176

TODD STAILEY
SESSION DATES 2015

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 12:30PM • Monday - Friday
Aquatots learn about the Aquarium’s animals and get to meet some face-to-face! Campers participate in hands-on activities, crafts, stories and outdoor fun.
Children must be potty-trained.
$95/Member; $127/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Bullfrogs
Join us for a week of fun as we discover the amazing world around us.
From Explore the Aquarium, visit with animals and their caretakers, hike, raft, sleep overnight alongside “River Giants” and go caving.
$245/Member; $327/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
With a Wednesday overnight
Leap into fun as we discover the amazing world around us.
Explore the Aquarium, visit with animals and their caretakers, hike, raft, sleep overnight alongside “River Giants” and go caving.
$245/Member; $327/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
With a Thursday overnight
Campers become Eco-Explorers inside the Aquarium and outdoors.
Adventures include behind the scenes tours, a Thursday overnight and a trip to the water park at Horn’s Creek NOC Resort.
$245/Member; $327/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Quest Camp blends science with adventure in the outdoor “classroom.”
Campers must participate in all activities.
$345/Member; $415/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Reflection Riding and Tennessee Aquarium join forces to bring campers nose-to-nose with animals indoors and out. Campers learn to canoe, hike and get down and dirty on Mud Day.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Join the Polliwogs as we discover amazing facts each day exploring the oceans, wetlands, rainforests, deserts, temperate forest and the Antarctic. While we learn about ecosystems, we will also climb, splash and play in the woods.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Come join the Tadpoles to learn about many different animal groups, create fun crafts, play games and splash in the Aquarium stream. Your exploration will also take you to Reflection Riding and the Chattanooga Zoo. Children must have attended kindergarten.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Treefrogs
Join the Polliwogs as we discover amazing facts each day exploring the oceans, wetlands, rainforests, deserts, temperate forest and the Antarctic. While we learn about ecosystems, we will also climb, splash and play in the woods.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Aquatots learn about the Aquarium’s animals and get to meet some face-to-face! Campers participate in hands-on activities, crafts, stories and outdoor fun.
Children must be potty-trained.
$95/Member; $127/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Tadpoles
Come join the Tadpoles to learn about many different animal groups, create fun crafts, play games and splash in the Aquarium stream. Your exploration will also take you to Reflection Riding and the Chattanooga Zoo. Children must have attended kindergarten.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Polliwogs
Join the Polliwogs as we discover amazing facts each day exploring the oceans, wetlands, rainforests, deserts, temperate forest and the Antarctic. While we learn about ecosystems, we will also climb, splash and play in the woods.
$180/Member; $240/Non-member

AQUATOTS AGES 4-5 (Pre-K)
SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 12:30PM • Monday - Friday

TADPOLES AGES 5-6
SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday

TREEFROGS AGES 7-8
SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday

POLLIWOGS AGES 7-8
SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday

TIPS ON REGISTERING YOUR CAMPER:
- Have your current membership & credit card numbers ready when registering.
- Renew your membership now to be ready for early registration!
- Camp activities are developed for specific age groups. Children must be the correct age for the camp they register for during the camp session.
- Spaces are limited! Only register for one week of camp per child.
- A $25 fee will be applied for transfers or cancellations.
- New in 2015! Register online using mobile devices.

MEMBER REGISTRATION BEGINS MONDAY, MARCH 2nd @ 8:30AM
NON-MEMBER REGISTRATION BEGINS ON MONDAY, MARCH 9th @ 8:30AM

REGISTER ONLINE AT:
TNAQUA.ORG/SUMMER-CAMP

Support is available: summercamp@tnaquarium.org or (423) 785-4176

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 12:30PM • Monday - Friday
Aquatots learn about the Aquarium’s animals and get to meet some face-to-face! Campers participate in hands-on activities, crafts, stories and outdoor fun.
Children must be potty-trained.
$95/Member; $127/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Bullfrogs
Join us for a week of fun as we discover the amazing world around us.
From Explore the Aquarium, visit with animals and their caretakers, hike, raft, sleep overnight alongside “River Giants” and go caving.
$245/Member; $327/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
With a Wednesday overnight
Leap into fun as we discover the amazing world around us.
Explore the Aquarium, visit with animals and their caretakers, hike, raft, sleep overnight alongside “River Giants” and go caving.
$245/Member; $327/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
With a Thursday overnight
Campers become Eco-Explorers inside the Aquarium and outdoors.
Adventures include behind the scenes tours, a Thursday overnight and a trip to the water park at Horn’s Creek NOC Resort.
$245/Member; $327/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Quest Camp blends science with adventure in the outdoor “classroom.”
Campers must participate in all activities.
$345/Member; $415/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Join the Polliwogs as we discover amazing facts each day exploring the oceans, wetlands, rainforests, deserts, temperate forest and the Antarctic. While we learn about ecosystems, we will also climb, splash and play in the woods.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Come join the Tadpoles to learn about many different animal groups, create fun crafts, play games and splash in the Aquarium stream. Your exploration will also take you to Reflection Riding and the Chattanooga Zoo. Children must have attended kindergarten.
$180/Member; $240/Non-member

SESSIONS 1 2 3 4 5 6 7 8 9
9AM - 4PM • Monday - Friday
Treefrogs
Join the Polliwogs as we discover amazing facts each day exploring the oceans, wetlands, rainforests, deserts, temperate forest and the Antarctic. While we learn about ecosystems, we will also climb, splash and play in the woods.
$180/Member; $240/Non-member
Dig in your claws during an intensive, week-long overnight summer camp with scientists from the Tennessee Aquarium Conservation Institute (TNACI). The Baylor School serves as CLAW base camp. We’ll stay in the dorms and use the classroom when we’re not in the field. Explore, paddle, hike and snorkel to discover our connections to aquatic ecosystems during CLAW. Then, become a water conservation hero at home. Cost is $750. Full and partial scholarships are available. Spots are limited and competitive. Complete the online application with a recommendation from a teacher, scout leader, supervisor or minister. Applications and recommendations are due by April 1st. Those accepted will be notified by April 15th. Camp is open to rising 10th-12th graders. tnaqua.org/protect-freshwater/claw-camp

CLAW!
JULY 21-27

Tennessee Aquarium educators will lead exciting outdoor adventures, reconnecting teens to nature. Become immersed in science with the outdoors as a classroom by participating in these group activities:

- Hike and explore during the day and at night
- Canoe a lake nestled between mountain peaks
- Climb and swing through a high-ropes challenge course
- Snorkel in a pristine mountain stream
- Wiggle your way through a wild cave
- Spend one night in a mountain cabin and cook dinner over a fire

QUEST camp (for ages 13-14) is July 27-31. Register online:
TNAQUA.ORG/SUMMER-CAMP

QUEST Camp
for young teens with a thirst for adventure!
SPRING EVENTS

Register online & discover newly-added events at:
TNAQUA.ORG/EVENTS-PROGRAMS
OR CALL 423-267-FISH (3474)

All events are held on Eastern Time. Full event details, including Non-Member pricing, are available at tnaqua.org/events-programs. There’s plenty of fun every day at the Tennessee Aquarium. Before your next visit, check the list of FREE PROGRAMS (with your membership or paid admission) to make the most of your day of aquatic adventure: tnaqua.org/animals-exhibits/extraordinary-experiences.

MARCH

Aquarium Adventures: The Quest for Colors
Thursday • 9:30-10:30AM
Bring your tykes on a quest to discover the eye-catching colors of our exhibits before Ocean Journey opens for the day! While this adventure with aquatic life is intended for explorers ages 2-4, parents and siblings are welcomed to join the expedition.
Ages 2-4 • Register child only
Limited to 12 • FREE/Members

Rain Barrel Workshop
Saturday • 10AM-Noon
Rainfall runoff is the number one cause of pollution in our streams. Do your part to reduce stormwater runoff by building your own rain barrel! This workshop will allow you to convert an empty Coca-Cola syrup drum into a working rain barrel with experts from Ace Hardware. Please bring a vehicle large enough to bring your rain barrel home.
Includes a pre-drilled barrel and kit with hose adapters, spigot, and basket for trapping debris.
Adults • Limited to 20 • $25/Member

Alligator Bayou Bash!
SPECIAL MEMBER NIGHT
Friday • 6-8:30PM
Be among the first to see Alligator Bayou—our newest exhibit with more animal programming and a dozen alligators silently patrolling the waters in front of a Cajun shack. Discover the importance of wetland habitats and how Aquarium herpetologists work with our new gators and other wetland creatures. Join us in our transformed Delta Country exhibit for special “Day on the Bayou” activities from 10am-3pm before the Alligator Bayou Bash.
All Ages • FREE/Members
Non-Members: $14.50/Adult; $9.50/Child

Full event details & Non-Member pricing at: tnaqua.org/events-programs

DO WE HAVE YOUR CURRENT EMAIL ADDRESS?
If you would like to stay on top of the latest Aquarium news, get notifications of new events and electronic renewal reminders, visit us at community.tnaqua.org to create your online profile. After signing up, you’ll be able to update your address, access your giving history, review your membership’s expiration date or sign up for e-newsletters.

PHOTO MEMBERSHIP CARDS
If you don’t already have your photo membership card, stop by the Members’ Entrance in River Journey and have your new card made on your next visit. Bring in your old membership card without the photo and we will recycle it for you.

FOLLOW US ON FACEBOOK & TWITTER
Keep up with our daily postings — you can even join in the conversations!

Official sponsor of the Tennessee Aquarium Membership Program.

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.
21 Williams Island Kids’ Adventure Cruise
Saturday • 12:30-2PM
Bring the whole family aboard for special scavenger hunts and animal encounters on this 90-minute cruise. The Aquarium’s expert crew will lead your tour around William’s Island to learn about its unique beauty and history. Presented by Tennessee American Water.
All ages • Limited to 68
$20/Member age 3 and up
$18/Children (age 2 and under)

29 Spring Wildflower Walk
Sunday • 2-5PM
Ephemeral flowers, beauty of Spring, and an Aquarium expert to guide you... Bring your camera to capture memories on your walk through Cloudland Canyon State Park. Horticulturist Christine Bock will help you discover the many native wildflowers found in the rich wooded areas close to home.
Ages 12+ • Limited to 15 • $4/individual

11 Vegetable & Herb Container Gardening Workshop
Saturday • 2-3:30PM
Whether you have a large or small space, here’s your chance to learn more about container gardening! Learn about new heirloom varieties of veggies and herbs as experts from The Barn Nursery coach you on organic planting practices. Materials for purchase in their Garden Gift Shop will get your garden growing in no time! Presented by The Barn Nursery.
All ages • Limited to 50 • FREE Seminar

2 Waste Not, Want Not: Water Quality Cruise
Saturday • 12:30-2:30PM
Do you know what exactly is in your water? Join Matthew Snyder, Sewer Project Coordinator at the Moccasin Bend Wastewater Treatment Facility, on this eye-opening cruise detailing the filtration and biological applications involved in our community’s water treatment process. Cash bar with wine, beer, soft drinks, and snacks available during the cruise.
All ages • Limited to 68
Members: $24/Adult; $18/Child (age 0-12)

7 Around-the-World Dinner @ Broad Street Grille
Thursday • 6:30-8:30PM
Your taste buds will bloom with Broad Street Grille’s sustainable seafood cuisine enhanced by global flavors. The talented culinary team will provide you with an incredible menu that includes fresh ceviche, smoked trout salad, pickled gulf shrimp and market white fish. This event includes four tasting courses, a glass of wine, recipes and gratuity.
Adults • Limited to 24 • $50/Members

Meet Dustin Mason, our new Membership Manager.
Dustin comes to the Aquarium most recently from Chattanooga’s Downtown YMCA where he was the Associate Executive Director. A business graduate of the University of Tennessee, Knoxville, Dustin has more than 10 years of experience in management, communications, marketing and customer service. “I’m thrilled about being part of the Tennessee Aquarium family,” said Mason. “Even more, I look forward to serving and meeting all of our members.” Hopefully you’ll meet Dustin soon at the Members Entrance or upcoming member events.

Full event details & Non-Member pricing at: iamaqua.org/events-programs
I waded in cold water where the overhead airspace shrunk to less than one foot. I tilted my head sideways, my helmet scraping across the ceiling of the cave. One of my eyes and the corner of my mouth were submerged until the cave passage opened again.

Here the water was clear, but too shallow for snorkeling. I moved slowly on my knees, armed with a dive light and a small aquarium net. As my colleagues and I explored a series of tight tunnels, I hoped to get a clear view of any creatures that might be lurking ahead.

Our four-hour caving trip revealed several Southern Cavefish and Mammoth Cave Crayfish, but I was most elated to capture a total of four specimens of Kentucky Cave Shrimp, including one female that was carrying eggs. This was a successful research expedition into a different kind of national park—a cave.

Freshwater scientists like me don’t just study rivers. I’m also an explorer who travels deep underground—through tight holes and chilly waters—to study the hidden freshwater life below our surface. Caves are exciting for biologists because they are the last unexplored frontiers in the United States, containing some fascinating animals that are still new to science.

Life in a cave isn’t always easy, and animal adaptations among cave critters are especially cool. Because subterranean creatures live in pitch black, cave shrimp—like the species of Tuscumbia Cave Shrimp I was the first to discover—have developed without eyes. In the absence of light, they use whip-like antennae that are more than three times their body length to navigate. Cave shrimp graze on sediments in the bottom of pools eating bacteria, algae, and fungus. Somehow, in the darkness and silence, cave shrimp find mates and the females carry more than 30 eggs under their tail.

Aquatic life in caves—like Cave Fish, Cave Salamanders and Cave Shrimp—also provides us with vital information about the overall health of the groundwater they live in. What we learn underground is not only vital to protection of cave ecosystems, it also helps us ensure safe drinking water for people.

Almost half of all people in the U.S. rely on groundwater for their drinking water, either from wells or tapping directly into springs where groundwater reaches the surface. It’s really important to understand where negative impacts to groundwater happen, but it is not an easy task. Groundwater reserves don’t share the same connections as what we see in the creeks and streams that make up watersheds on the surface.
So scientists get clues about how water moves underground by studying the movement and genetics of sensitive aquatic creatures living in caves.

Cave shrimp are particularly sensitive to pollution. Their presence in our region provides important information about the health of our groundwater supply. There are only three species of cave shrimp in North America, members of a group that is found worldwide. But unlike their tasty saltwater cousins, all 450+ species in this group of shrimp live in freshwater.

Preliminary genetic analysis on the Kentucky Cave Shrimp we captured shows that they are very distinct from other species. We’re now trying to learn more about differences within all three species, which will help us better understand groundwater connections at the local scale.

These three cave shrimp species are all found in the southeastern United States, which boasts the greatest freshwater biodiversity of any temperate climate in the world. In addition to being a hotspot for mussel and fish diversity, our region is also a hotspot for caves and cave organisms. There are more than 4,400 caves and 150 cave-dwelling species in just a six county region in northeast Alabama and south-central Tennessee.

On your next Aquarium visit, head to the Tennessee River Gallery to look for the Tennessee Cave Salamander exhibit. Nearby you’ll spot another animal that’s very dependent on healthy freshwater that rises up from underground—the spring-dwelling Barrens Topminnow.

Hopefully you’ll see them and think about the health of bizarre creatures that dwell in darkness, colorful fish that bask in the sunlit fields of middle Tennessee, and how the flow of freshwater connects us all.
TWO NEW FILMS AT THE IMAX® 3D THEATER

ISLAND OF LEMURS: MADAGASCAR 3D

A very special group of animals living on a remote island in the Indian Ocean may be best known as cartoon characters. But Lemurs are very real.

You’ll see them joyously leaping from tree to tree and bounding across a spectacular landscape when Island of Lemurs: Madagascar 3D comes to IMAX. “The lemurs’ story is one of the great adventures of epic proportions,” said Drew Fellman, the film’s writer/producer. “A twist of fate brought them to this strange island where they forged a new life and a whole parallel reality that was uniquely theirs. That really inspired us to make this movie.”

The film is both an engaging adventure and an inspiring account of the life and career of Dr. Patricia C. Wright, who has made the modern-day survival of the highly endangered but lovable lemurs her life’s work.

Bringing this 3D film to audiences was no easy task. Lemurs live in remote areas not conducive to travel, much less film-making. It took arduous treks through mountains and desert, and across fields of rocks and rivers to reach remote rainforests where lemurs live. Add fickle weather and the filmmakers had daunting obstacles to overcome. “Everything in Madagascar changes so quickly that it was impossible to plan more than a few days in advance,” said Fellman. “That’s a terrible way to make a movie, but the animals were so charismatic and so appealing that it was worth all the craziness to get it right.”

The film offers an engaging portrayal of a variety of lemurs—the Ring-tailed lemur, perhaps the most recognizable because it is in zoos around the globe, the Mouse lemur, the Greater Bamboo lemur, Sifaka lemurs and Indri lemurs—in and out of their natural habitat. “One of the funniest sights in Madagascar is watching the ringtails sunbathe in the morning,” said Fellman. “After waking up, they climb to the tops of rocks and trees and open their arms wide to catch the sun.”

Leaping over huge chasms from one craggy rock formation to the next by day, ringtails curl up on the side of a cliff together at night, forming one massive lemur ball with the babies in the center.

However nothing quite captures the fun of lemurdom more than the sight of dancing Sifakas. Sifakas are large, slender lemurs that are mostly arboreal. They can leap great distances between the trees covered in needle-sharp spines. They’re built for jumping, not walking, and when they travel on the ground; they skip and dance from side to side. “It’s hilarious, it’s acrobatic, just an extraordinary sight to see,” said Fellman.

If the Sifakas are the dance troupe, the Indri, the largest of the lemurs, are the choral masters. “They have a primitive wail that echoes through the forest,” said Fellman. “The whole group will join in and sing to each other across long distances.”

Stunning aerial and other views of Madagascar and never-before-filmed footage of lemurs in their natural habitat make Island of Lemurs: Madagascar 3D a film that entertains, teaches and encourages the notion that humans are here to share the planet and to protect those who inhabit the Earth along with us.
There are 78 whale species in the world but, among them all, Humpback Whales are unique. They’re the only whales that sing.

Specifically, it’s the males that do the crooning which occurs primarily during the mating season. Their haunting melodies are complex and get repeated over and over. The compositions often change, yet all of the singers in one population seem to have the same lyrics. However, Humpbacks in another part of the world sing very different tunes. While researchers are still trying to understand the mystery behind these wonderful vocalizations, the rest of us sit back and marvel at this music.

On March 6th, you’ll feel as though you’re in the ocean surrounded by these titanic troubadours when Humpback Whales 3D fills the six-story screen at IMAX. “They are among the largest animals to ever live on earth and we knew they would look amazing on the big screen,” said Greg MacGillivray, the film’s director. “Humpbacks also have the longest pectoral flippers, proportionally, of all whales, so they can maneuver like no others and turn on a dime. They have a unique love of leaping, or breaching, from the water, and they’re very playful and high-energy. I think of them as the ocean’s acrobats.”

The film follows several groups of Humpbacks, from the clear turquoise waters of the South Pacific to Africa, Hawaii and Alaska. You’ll see their feeding behaviors, getting so close you can almost smell their fishy breath, and witness tender moments between mother whales and their calves. “I was awed by their majesty, their agility and their curiosity, and moved by the instinct the females have for motherhood,” said MacGillivray. “We have a great underwater shot of a mother who let her baby get about ten feet away from us.”

Almost extinct half a century ago, the Humpback Whale population is growing, a result both of their perseverance and the effort of nations around the world determined to stop their extermination. It is a remarkable comeback for a playful beast that sang its way into our hearts. “Humpback Whales are at the center of an environmental story that offers great promise,” said MacGillivray. “With their increasing numbers, we now have a tremendous opportunity to learn more about just how magnificent, intelligent and vital to oceanic ecosystems they really are.”

Members are invited to be among the first to see Humpback Whales 3D. Present your valid membership card at the IMAX box office or River Journey Members Entrance to receive two free tickets for any of the screenings on March 6, 7 and 8. No pre-registration is required. Additional tickets may be purchased for $6/Member. Pre-registration is not required, but seating is limited and available on a first-come, first-served basis.
RIVERWATCH

RIVERCURREN T S

FOLLOW US ONLINE FOR DAILY UPDATES & BREAKING NEWS!

CERTIFIED TENNESSEE NATURALIST PROGRAM

The Aquarium and Reflection Riding are partnering to offer the Tennessee Naturalist program. This five-month training course helps you learn more about the region’s plants, animals, geology and ecology. The program has a volunteer requirement that allows certified naturalists to continue their learning adventure while introducing others to the wonders of Tennessee’s natural resources.

Classroom sessions, held on Tuesday evenings at the Aquarium, are two hours in length with additional field studies at various locations. Cost of the Tennessee Naturalist program is $250 for all 15 sessions and field studies. You can learn more about the program at TNNaturalist.com. Contact Julia Gregory if you have any questions at (423) 785-4054. You may register online for the classes at: bit.ly/tnnaturalist.

BROOK TROUT T-SHIRT

Our newest t-shirt features Tennessee’s only native trout species. Buy your Brook Trout T-Shirt on your next visit, or in our online shop at: store.shopaquarium.org and celebrate the efforts of the Tennessee Aquarium Conservation Institute and partners to save “Brookies.” Members receive their 10% discount online by using the promo code TROUT.

Fair Trade: at the Tennessee Aquarium we strive to not only educate our guests about the importance of water, but we also support Fair Trade businesses as much as possible.

What is Fair Trade? It means that the artists and farmers who create their wares receive a fair rate for their product.

One of the companies that we work with is Lucuma Designs. They use Fair Trade practices in Peru. The artists create beautiful pieces made from gourds—everything from ornaments, boxes for jewelry or lovely wall hangings. Visit the River Journey Shop to check out these great pieces!

YOUTH VOLUNTEER SPOTLIGHT

Look for youth volunteers like Shailey Shah on your next visit. These high school students love nature and are eager to share their knowledge about our animals and exhibits.

Shailey became immersed in the Conservation Leadership in Action Week, CLAW, camp this past summer, snorkeling mountain streams, kayaking and hiking. Her experiences fueled her passion to serve the Aquarium and enhance the guest experience by connecting with others. She believes her gift of time has been enriching in ways she never expected. “The Tennessee Aquarium provided me with a second family, new friends with shared interests, as well as the tranquility of swimming fish and the playful behavior of animals that makes me curious,” said Shailey. “This is why I volunteer…I just cannot seem to get enough of the Aquarium experience.”

Do you know someone like Shailey? If so, we’re looking for more high school youth volunteers. Students must have completed one year of high school science to be eligible for the program. After successfully completing a training course and exam, youth volunteers become members of the Aquarium’s education team and will be responsible for a 4.5 hour shift twice a month. Learn more at: tnaqua.org/volunteer-opportunities.

CO U R T E S Y O F J U L I A G R E G O R Y

TODD STAILEY

BROOK TROUT T-SHIRT

Our newest t-shirt features Tennessee’s only native trout species. Buy your Brook Trout T-Shirt on your next visit, or in our online shop at: store.shopaquarium.org and celebrate the efforts of the Tennessee Aquarium Conservation Institute and partners to save “Brookies.” Members receive their 10% discount online by using the promo code TROUT.

Fair Trade: at the Tennessee Aquarium we strive to not only educate our guests about the importance of water, but we also support Fair Trade businesses as much as possible.

What is Fair Trade? It means that the artists and farmers who create their wares receive a fair rate for their product.

One of the companies that we work with is Lucuma Designs. They use Fair Trade practices in Peru. The artists create beautiful pieces made from gourds—everything from ornaments, boxes for jewelry or lovely wall hangings. Visit the River Journey Shop to check out these great pieces!

CO U R T E S Y O F J U L I A G R E G O R Y

TODD STAILEY

TODD STAILEY

YOUTH VOLUNTEER SPOTLIGHT

Look for youth volunteers like Shailey Shah on your next visit. These high school students love nature and are eager to share their knowledge about our animals and exhibits.

Shailey became immersed in the Conservation Leadership in Action Week, CLAW, camp this past summer, snorkeling mountain streams, kayaking and hiking. Her experiences fueled her passion to serve the Aquarium and enhance the guest experience by connecting with others. She believes her gift of time has been enriching in ways she never expected. “The Tennessee Aquarium provided me with a second family, new friends with shared interests, as well as the tranquility of swimming fish and the playful behavior of animals that makes me curious,” said Shailey. “This is why I volunteer…I just cannot seem to get enough of the Aquarium experience.”

Do you know someone like Shailey? If so, we’re looking for more high school youth volunteers. Students must have completed one year of high school science to be eligible for the program. After successfully completing a training course and exam, youth volunteers become members of the Aquarium’s education team and will be responsible of a 4.5 hour shift twice a month. Learn more at: tnaqua.org/volunteer-opportunities.

CO U R T E S Y O F J U L I A G R E G O R Y

TODD STAILEY

TODD STAILEY

CERTIFIED TENNESSEE NATURALIST PROGRAM

The Aquarium and Reflection Riding are partnering to offer the Tennessee Naturalist program. This five-month training course helps you learn more about the region’s plants, animals, geology and ecology. The program has a volunteer requirement that allows certified naturalists to continue their learning adventure while introducing others to the wonders of Tennessee’s natural resources.

Classroom sessions, held on Tuesday evenings at the Aquarium, are two hours in length with additional field studies at various locations. Cost of the Tennessee Naturalist program is $250 for all 15 sessions and field studies. You can learn more about the program at TNNaturalist.com. Contact Julia Gregory if you have any questions at (423) 785-4054. You may register online for the classes at: bit.ly/tnnaturalist.

CO U R T E S Y O F J U L I A G R E G O R Y

TODD STAILEY

TODD STAILEY
WETLAND SIMILES MAKE YOU SMILE!

Wetlands are really important to people and wildlife because of all the services they provide. See if you can match the items in the left column with the needs being served in the right column. It will help if you use this fill-in-the-blank sentence: “A wetland is like a (item in the left column) because (it does something in a picture in the right column).

A GROCERY STORE
B HOTEL
C NURSERY
D SPONGE
E PHARMACY
F PLAYGROUND
G COFFEE FILTER

Many medicines are made from plants that grow in wetlands
Wetlands produce food for people and wildlife
Wetlands hold extra rain water and so help to control flooding
Migrating wildlife stop there to rest
Wetlands filter pollutants from water that passes through them
Many animals (including some that people like to eat) begin their lives in wetlands
Playground Wetlands are a place where we can have fun! Bird watching, fishing, hydroplane
The Tennessee Aquarium is a non-profit organization with a mission to inspire wonder, appreciation and protection of water and all life that it sustains. Your dollars support our many education, conservation and research programs. Follow us on Facebook & Twitter and partner with us to continue our mission.

community.tnaqua.org/donate

OPEN DAILY 10 a.m. - 6 p.m. Closed Thanksgiving & Christmas Day.

RIVERWATCH EDITOR
Thom Benson
riverwatcheditor@tnaqua.org

EVENTS EDITOR
Matthew Hubbard

GRAPHIC DESIGNER
Karen Estes

PHOTOGRAPHER
Todd Stailey

Riverwatch is published quarterly by the Tennessee Aquarium. Written material may not be reproduced without proper credit. The logo, the name Tennessee Aquarium and Riverwatch are registered trademarks of the Tennessee Aquarium. IMAX® & IMAX®3D are registered trademarks of Imax Corporation, Mississauga, Canada.

QUESTIONS ABOUT MEMBERSHIP? Visit us online at tnaqua.org/Membership
423-267-FISH (3474) • join-us@tnaqua.org

RIVER GORGE EXPLORER

WILLIAMS ISLAND KIDS’ ADVENTURE CRUISE

Saturday, March 21
12:30 - 2PM

Bring the whole family aboard for special scavenger hunts and animal encounters on this 90-minute cruise. The Aquarium’s expert crew will lead your tour around Williams Island to learn about its unique beauty and history.

tnaqua.org/events-programs

TIME-SENSITIVE MATERIAL