

Life ON THE Lakes

INFORMATION ABOUT LAKES
HAMILTON AND CATHERINE



Evans Tree House Named and Opened at Garvan Woodland Gardens

Garvan Woodland Gardens, an outreach center of the E. Fay Jones School of Architecture and Design at the University of Arkansas, announces the opening of its Evans Tree House within the Evans Children's Adventure Garden. A culmination of many years of vision, ambition, creative design and constructive effort by contributors from all corners of the state that was totally funded by and completed with private donations from just under 350 individuals. The Tree House is suspended within a group of pines and oaks, bending easily between them. The theme of dendrology, the study of trees and wooded plants, drives both the form and program of the structure, designed by the Fayetteville-based architecture firm *modus studio*. Part of an ambitious plan to bring children back into the woods, the tree house will use a rich visual and tactile environment to stimulate the mind and body, while accommodating the needs of all users. Dean Peter MacKeith, of the E. Fay Jones School, said,



"The school is deeply grateful to Bob and Sunny Evans and the 'Tree House Gang,' in particular, for their faith and commitment to this superb installation – an outdoor classroom for children of all ages to enjoy."

The structure consists of four levels, accessible from the ground and an overhead circular boardwalk, and each level is based upon a different part of the tree and its function, allowing visitors an intrinsic, almost subconscious, learning opportunity that builds on the experience. The first, most basic level focuses on the roots of the tree, and is actually below the Tree House in the Root Plaza. As users move into the structure, levels represent the various parts of a tree (trunk, branches, leaves, and fruit/flowers), and each level's significance in the life cycle of a tree is explained.

Specially treated yellow pine ribs make up the shell encasing the open-air structure, while other elements, such as the unique "Venetian Screen" on the overlook end of the structure, are made from metal. The Root Plaza is made of poured concrete with inlaid tiles, while native Arkansas stone abounds in the surrounding landscape.

The Evans Tree House is a part of the larger Evans Children's Adventure Garden, completed in 2006 and best described as a playful area offering 1.5 acres accented with 6.5 million tons of Arkansas-quarried boulders positioned in mazes to encourage exploration of the natural environment. A 12-foot waterfall cascades over the entry to a man-made cave, beckoning children inside to discover ancient "fossils" overhead. The garden also features a unique bridge constructed from "aged" wrought iron "cedar trees" and a series of cascades and wading pools. A 450-foot-long circular boardwalk is suspended 20 feet above the forest floor and allows scenic vistas over the garden as well as Lake Hamilton and the surrounding woodlands.

Electrical Components Requirements Over Water

There has been some confusion on the requirements for electricity on docks and other facilities over water. Owners of all facilities on lakes Hamilton & Catherine are responsible for ensuring that all electrical components on their facilities comply with current guidelines and standards. This is often identified when docks change ownership (which requires a permit transfer) requiring them to be brought into compliance with all applicable federal state and local codes before they can transfer to the new owner.

Arkansas law requires facilities over water to conform to the latest National Electric Code adopted, which is NEC 2017. A provision of the code dealing with Ground Fault Circuit Interrupters (GFCI) has led to some concern. So, we reached out to the state electrical inspector, as well as the chief state electrical inspector for guidance and clarification.

Here's what they say: Similar to how GFCI breakers and outlets offer protection in the wet areas of your home (kitchen, bathroom, laundry, etc.) a GFCI breaker must be installed at a point on the system before it leaves the mainland and transitions to the dock. The maximum this GFCI protection can be is 30mA. 30mA, though, is what is considered adequate protection for equipment, but not people. What's considered safe for people is a breaker that will trip at 5mA. If a GFCI breaker of greater than 5mA is installed at the breaker box, to achieve personal protection you will also need to install covered 5mA GFCI outlets on the dock. If, instead a 5mA breaker is installed on the mainland feed, no further GFCI will be required over the water. But covered outlets are still required.

If you have any questions Entergy recommends that you contact a licensed electrician and/or the State Electrical Inspector's office at 501.682.4548.

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2018

Flow Increase Warnings Have Improved

Up until a few short months ago the signal issued from Carpenter and Rempel dams indicating an increase in flow from generation or gate openings provided a two-minute warning to those below the dams. This has been increased to a five-minute warning. This is especially important to all of the fly fishermen that take advantage of the great fishing grounds below Carpenter Dam during the winter drawdown.



**3,360
Pounds**

The rain dampened, but did not stop, these two events

Both the spring Cash for Trash Bash and the fall Trash Bash event were plagued by poor weather. But many dedicated volunteers showed up to help make a difference. While the total litter removed from shorelines, stream beds, ditches and area streets was reduced this year due to the rain, participants still had a good time improving the beauty of our community.

Check out more info on next year's events at www.arkansastrashbash.org.

Shoreline Inspection FAQs

Where can I go to find shoreline permitting information?

Entergy Shoreline Management has created a new quick link to all of the permitting information for facilities, activities and transfers. You can find it all under: www.energy.com/permitinfo.

Why does Entergy require inspections?

First and foremost Entergy wants to ensure the safety of our customers and neighbors. These inspections will help identify safety issues in a number of areas. Next, we needed a way to help us meet our requirements to the federal government that allow us to own and operate Carpenter and Rempel dams and, thus, lakes Hamilton and Catherine. This also gives us the opportunity to help our local and state governments with their signage law requirements.

When should I get an inspection

Entergy strongly suggests that upon listing a lake property for sale you look into this process. This will allow you, the owner, time to make any repairs required by Entergy. Entergy will not transfer the facility permit to the buyer until we have been presented with an inspection report and all requirements are met and/or all repairs completed.

How will I know what Entergy requires before transfer?

We will send an "Entergy Inspection Acknowledgement Form" to all parties listed on the inspection after review. Entergy will comment only on safety, regulatory, and legal items that are located over Entergy's property/shoreline. Condition-based claims will be left out of our report unless they are determined to be a safety concern.

Who can perform these inspections?

Any Arkansas state licensed home inspector may perform these inspections, but we highly recommend using one off of our list as they have been through training with us on the particular requirements that are different from a normal home inspection. Please see www.energy.com/permitinfo for a list of these inspectors.

What information will be required in these inspections?

The standards of practice for these inspections are listed on our permitting website; they contain a list of items that will be required of the inspector to present to us. If we do not receive all of this information, the report will be rejected. This is a good reason to use one the inspectors on the provided list as some of them have helped build and refine these standards.

Is there a sample inspection, so I can know what to look for?

Sure, this too can be found under the www.energy.com/permitinfo link to see a properly formatted inspection report.

How much do they cost?

As each inspector is an independent contractor, you will need to discuss fees with them. It is our understanding that those on the attached list generally charge in the neighborhood of \$200, but may also give a discount if done in conjunction with a home inspection. They may also charge a bit more for complex inspections.

PLANNING FOR WEEKENDS ON THE OUACHITA RIVER

Entergy's commitment to protecting the scenic, aesthetic, and recreational value of lakes Hamilton & Catherine extends to the Ouachita River as it makes its way from Rammel Dam. The stretch of river between Rammel Dam and Malvern is popular among kayakers, canoeists and even innertubers. Of course, these activities require water and Entergy is responsible for how much and when water is released into the river from Rammel Dam.

To accommodate recreation on the river, each weekend between Memorial and Labor Days (including the holiday), Entergy Arkansas will release water from Rammel Dam, typically through generation. It takes approximately two hours for the water released at the dam to reach the Whitewater Park in Malvern where most floaters take out. But, if simply enjoying the cool refreshing float on a tube (the most popular option) the float will last three to four hours - if one stops a time or two at gravel bars for a break.

Floaters can access the river in the Rammel Dam Tailrace area just below the dam. The parking area's surface is natural gravel, and there are signs showing where parking is allowed and not allowed. Parking along the main access to the area is prohibited to ensure safe access to and from the site for the public and emergency services. You can see a map showing the parking zones along the side of the road on the way down to the access point. The take-out point is often the Whitewater Park at Rockport, just outside of Malvern. Check www.facebook.com/lifeonthelakes or call 501-844-2125 to find out the days of the week and the hours for these releases.

So, enjoy the majestic beauty of the cliffs and hillsides that line that section of the Ouachita River, but be sure to respect private residential property along the left side of the shoreline. Always plan to be off the river within two hours of the end of the flow release, never carry glass bottles onto any of the rivers of Arkansas, and always carry a litter bag to pack out anything you bring in.



AGFC DEDICATES NEW TRAIL ON LAKE HAMILTON



In 1981 when Entergy, then AP&L, donated the 118-acre island in the middle of Lake Hamilton, now known as Electric Island, to The Nature Conservancy of Arkansas, it was to be set aside and managed as a nature preserve. The new trail installed this summer by the Arkansas Game & Fish Commission will enhance opportunities for hiking, exploring, bird watching, fishing and picnicking. Hunting and camping are not allowed.

Kirsten Bartlow, the AGFC's watchable wildlife coordinator, credits wildlife biologist Jake Whisenhunt with the idea of creating a nature trail on the island. AGFC helps manage the island. "He saw a trail as a way for people to enjoy this public land," Bartlow said.

The island has been known for its wildlife such as a herd of deer that swims between the island and shore of Lake Hamilton. Also, depending on the season, visitors might see bald eagles, loons, great horned owls, red-shouldered hawks and waterfowl, as well as migratory songbirds – not to mention armadillos, box turtles, ground skinks and more.

A two-mile, natural surface hiking loop has been cleared on the island, thanks to help from work-release inmates from the Arkansas Department of Correction Benton unit. Visitors will find two trailheads on the north side of the island with signs and beaches where boats can tie up. Among the unique spots to explore are the remnants of two houses that were built on the island back in the 1930s soon after the lake was created, with concrete foundations and chimneys still in place.

The inmates did the real work and "built the trail the old-fashioned way," Bartlow added, "with hand tools – Kaiser blades, hoes, rakes and saws. They did a really great job. It was a lot of work. The island has a park-like look to it." The Nature Conservancy has done some periodic prescribed burns, creating an open understory. Whisenhunt said that, in his view, Electric Island is still "a work in progress."

Light Pollution & Light Shielding

At some point in everyone's life, there's a moment when they look up on a clear night and become captivated by a bright sky of countless stars. These wonderful moments usually occur in remote areas outside of cities or towns, where the night sky is brightest. A major reason that more stars are visible in isolated areas is there is typically less light pollution. In an effort to keep the stars shining bright on our beautiful lakes, we will discuss what light pollution is, how it can be reduced, and what our current policies are related to this issue.



Shielded Lights that meet guidelines

There are different kinds of light pollution, but our primary focus will be on Skyglow. Skyglow is the increase in luminance of the night sky due to artificial lighting. The concept that an area will be brighter with more lighting is pretty obvious. However, an unfortunate and less intuitive side effect of this is with the increase in luminance there is a decrease in the brightness and visibility of the stars and moon. This phenomenon is due to light interference, which we experience every day. Some examples of when we encounter light interference are adjusting the brightness on a phone or turning off the lights to watch a movie. Although Skyglow occurs on a much grander scale, the concept is still the same.

The good news is that there are ways to prevent Skyglow. The easiest way is to reduce excessive and unnecessary exterior lighting. Another simple and very effective method is to utilize shields for external lights. A light shield is a cover that surrounds a light bulb to block light in certain directions. A light shield is similar to a lamp shade. Our policies regarding shields for lights on docks can be found in Section VIII: Electrical, Lighting of our General Guidelines & Specifications for Docks, Piers, Decks & Boardwalks document. You may find that document at

www.entergy.com/shorelineapplication. We encourage everyone to use similar measures for light shielding on their property to help brighten the stars and the moon for everyone.



Who to Call When...



Lights out on the bridge- This can be a navigation and safety concern. The Arkansas Department of Transportation, which maintains the lights, can be reached at 870-623-8312.

Reporting an accident- Two agencies handle boating regulation and enforcement: Arkansas Game and Fish Commission and Garland County Marine Patrol. If you have a boating accident, or see one, call AFGC at 501-525-0929 or the Garland County Sheriff Office at 501-622-3660.

Overflowing storm drains/storm water soil run-off- Inside the city limits call Hot Springs Storm Water Division at 501-321-6773. Outside the city limits call Garland County Inspections Department at 501-609-9067. You can also report it to the Arkansas Department of Environmental Quality at 501-682-0744.

Someone is burning or depositing yard waste in the lake bed- This is against Arkansas Law and you can report it to the Garland County Inspections Department at 501-609-9067.

Someone is digging, 4-wheeling, or using other equipment in the lake bed- This is damaging to the lake bed and can increase soil runoff please let us know at 501-844-2101.



Flooding happens during heavy rains, when rivers overflow, when ocean waves come onshore, when snow melts too fast, or when dams or levees break. This is the most common natural-weather event. Flooding may be only a few inches of water, or it may cover a house to the rooftop. Floods that happen very quickly are called flash floods.

Am I at risk?

Floods can occur in every single U.S. state. Some floods develop slowly, and some can build in just a few minutes. People who live in low-lying areas – near water or behind a levee or dam – are at even greater risk.

Did you know?

Flooding can change familiar places, like walkways, roads and fields. Avoid walking through water. It might be deeper than you think!



FACT CHECK

- 1 Which of the following does NOT cause a flood?
 - a. Tropical storms and hurricanes
 - b. Spring thaw and melting snow
 - c. New construction
 - d. None – they can all cause floods
2. True or False? 1 foot of water is enough to make most cars float.
3. True or False? 6 inches of moving water can sweep you off your feet.

ANSWERS
(1) d.
(2) True!
(3) True. Stay away from moving water!



For more facts and info on floods visit
<http://www.ready.gov/kids/know-the-facts/floods>
<http://emergency.cdc.gov/disasters/floods/>

What to do...

If you notice a problem at a dam – call 911. Local authorities know who to contact when there are concerns with the local dams on the Ouachita River.

If you notice a river/lake is unexpectedly high and rising on a clear day –

immediately head for higher ground and call 911 to report the situation.

If a road is covered with water – remember that floodwaters are deceptive. As the old saying goes, “Turn around, don’t drown.” Roadways can become compromised by floods and these weak spots are not always visible. Avoid flooded areas if you can.

If your car stalls in a flooded area – abandon it as soon as possible. Floodwaters can rise rapidly and sweep a car – and its occupants – away.

If a flood traps you in your house – move to the second floor and, if necessary, to the roof. Take warm clothing, a flashlight and portable radio with you. Then wait for help; don’t try to swim to safety. Rescue teams will be looking for you.

If you receive a reverse 911 call – first, take it seriously. Next, listen carefully and follow all of the instructions from the phone call. If it is to warn you of a flood, it may tell you to stay in your home or head to higher ground immediately. Do so as quickly as possible.

Entergy Arkansas, LLC monitors Carpenter and Rammel dams 24/7, but if you notice an unusual situation concerning the lake levels or the dams, call 911 to report it. Thanks to FEMA publication 593-237B (9/90) for information used in this article.

FLOODING? BE SAFE!

Turn Around Don't Drown





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 Malvern, Arkansas 72104

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What Requires a Permit?

All shoreline facilities, structures and ground-disturbing activities on Entergy Arkansas, LLC Project 271 lands, or water, require a permit from Entergy Arkansas prior to installation or activity. Some of the most common types of facilities, structures and activities that require a permit include:

- Boat docks
- Piers
- Landings
- PWC ramps/lifts
- Decks
- Walkways
- Boardwalks
- Bridges
- Boat Ramps
- Steps
- Seawalls
- Riprap
- Fill/dredge
- Excavation
- Roads
- Waterlines
- Buoys
- Utility facilities
- Water withdrawal
- Heat/Air exchange piping
- Inflatable platforms/trampolines
- Boat lifts (when outside the slip)



Any changes to the footprint, roof line, support structure or change in the size of an existing facility requires a new application/permit.

To learn more about Entergy Arkansas' shoreline facility permit program and the requirements and specifications for private facilities on Entergy Arkansas' property, visit our web site at www.entergy.com/hydro or contact us at (501) 844-2101.

Do you know of lakefront property owners who are not receiving this publication?

Send their names, addresses & emails to:

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Help Us With Our Mailing List

Please contact Entergy Arkansas, at 501-844-2101 or send an e-mail to tlee2@entergy.com with any corrections.