

# TVA River Neighbors



INFORMATION FOR TENNESSEE RIVER SYSTEM USERS • MAY 2000

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## INSIDE:

SPECIAL REPORT ON  
**Reservoir Health**



## Monitoring Water Temperatures for the Spring Spawn

### Volunteers Say It's Well Worth the Effort

**A**t 10:00 on Monday morning, the phone rings at Gilmore Boat Dock on Cherokee Reservoir. Co-owner Carol Davenport has been expecting the call. She reads off a list of numbers: "54.6° at six inches, 53.1° at two feet, 52.7° at five feet. You're welcome. Talk to you Thursday."

While the numbers may change, a variation of this same conversation takes place at a dozen other locations throughout the Tennessee Valley, week after week each spring. Davenport and other volunteers regularly monitor water temperatures on TVA tributary reservoirs, so the agency knows when to hold reservoir levels steady while fish are spawning. Anglers should be glad they do, according to TVA Fisheries Biologist Al Brown: "Accurate water temperature readings are necessary to determine just when sunfish, bass, and crappie come into the shallows to lay their eggs. If reservoir levels drop during that crucial

period of time, fish eggs can become stranded above the water line. If they dry out and die, that can severely impact spawning success for an entire year."

Once a week, starting some time in March, volunteers lower a TVA-provided temperature-sensing device into the water at a selected spot, taking readings at three depths:

*continued on page 2*



DAVID LUTTRELL (2)

*Volunteers like Carol Davenport, co-owner of Gilmore Boat Dock on Cherokee Reservoir, monitor water temperatures in the spring so TVA can stabilize reservoir levels while fish are spawning.*

## Hats Off to These Volunteers!

TVA also would like to say thanks to these volunteers who have donated their time to monitor water temperatures—some for more than a decade:

**Donny and Jenny Lesesne,**  
Lake Blue Ridge Marina

**James Matherly,** Jay's Boat  
Dock, Boone

**Shannon McKinney,** Bear Creek  
Development Authority, Cedar  
and Little Bear

**David Clem,** Boundary Water  
Marina, Chatuge

**Steve Monroe and Mike Berrier,**  
Douglas Lake Marina

**Todd St. John,** TWRA's  
Normandy Fish Hatchery

**Ray Doucette,** Nottely Marina

**John Slagle, Jr.,** Lakeview Dock,  
South Holston

**Tim Tyler,** Tyler's Market,  
Tims Ford

**Ernie Reese and Tom White,**  
Fish Springs Dock, Watauga

**Jim Mathis,** Almond's Boat Dock,  
Fontana.



*Zeke Vanderpool, whose family owns Andersonville Boat Dock on Norris Reservoir, says that keeping reservoir levels stable during the spring spawn has made a noticeable difference in the fish population.*

six inches, two feet, and five feet. When the water reaches 60° Fahrenheit, they begin taking temperatures at the same spot twice a week. Temperature readings are reported to a TVA staff person, who calls at a regular time chosen by each volunteer.

When water temperatures at the five-foot depth reach 65°—which usually happens anywhere from late April to mid-May—TVA's River Scheduling staff is notified. Then, for the next two weeks, every effort is made to keep levels as steady as possible while fish are spawning. "Of course, there are some situations—in times of flooding, for example—where it just can't be done," says Brown. "But our folks in River Scheduling go to great lengths to avoid a drop in elevations during this critical window of time, which can be tough given the difficult task they have of trying to manage the reservoir system for multiple benefits."

So, with all the other demands of running a marina or boat dock, why would anybody volunteer to do this—week in and week out, for several months at a

time? Carol Davenport says she and her husband Frank do it because of the enjoyment Cherokee Reservoir has brought to them—as well as to their customers and friends. "We are more than willing to 'give back' in this way," she explains. "It's just part of our value system to do what we can to help preserve the environment—including aquatic life. And our economic future is linked to this lake. If it does well, we do well. It's as simple as that!"

Zeke Vanderpool echoes that sentiment. His

family has owned and operated Andersonville Boat Dock on Norris Reservoir for 17 years. "As dock owners and sportsmen," he says, "we see stabilizing lake levels for the spring spawn as playing a key role in preserving recreational angling opportunities. As far as fitting water temperature monitoring in with the rest of the work load around here, we consider it well worth the effort. We're out here on the lake anyway and we're glad to do it!" Vanderpool grew up fishing on Norris Reservoir and says he's spent many happy hours going after bass and crappie. "The best part about doing this is that we can see it's making a difference in the fish population. It's a really positive development for anglers, and for the lake in general. It's wonderful to see families coming back here year after year—passing their love for this lake on to the next generation."

Brown is quick to note the importance of the volunteer effort to TVA: "Without the help of these dedicated individuals, we'd have to find another way to get these temperature readings. It's an incredible advantage to us to have these folks willing to donate their time to assist us. They really care about these reservoirs, and it shows."



## HEADS UP!

## If the Forecast Is Right, Get Ready for a Hot, Dry Summer

**A**fter a very dry autumn and winter, rainfall so far this spring has been near normal. But as *Neighbors* goes to print, many forecasters are still predicting another hot, dry summer. We checked with a lot of different experts at TVA to find out what this could mean for the river system. Here's what they said could happen if things get bad enough:

*Arland Whitlock, River Scheduling:*

"An extended drought would make it difficult to fill the reservoirs to their June 1 target levels and to keep them above the minimum summer levels until August 1. This would affect recreation and other benefits."

*Don Dycus, Reservoir and River Quality:*

"Warm temperatures and low flows would affect ecological conditions in our reservoirs. We'd probably see more algae and lower dissolved oxygen levels. Fish growth and reproduction could be affected, as well as the survival of some of the less 'mobile' animals living on the bottom."

*Chuck Feagans, Electric System Operations:*

"The demand for power would increase as people turned up their air conditioners for

relief from the heat. But less water would be available for hydrogeneration and for cooling our thermal plants."

*David Webb, Aquatic Plant Specialist:*

"Warm, clear water will encourage the growth of aquatic weeds such as watermilfoil, hydrilla, and spiny-leaf naiad."

*Larry Clark, Environmental Engineer:*

"Some communities may have to encourage conservation or implement restrictions on outdoor water use. Drinking water may require additional treatment to avoid problems with taste and odor resulting from increased algal growth. Less water would be available for wastewater assimilation."

One thing is for sure: if the hot, dry weather materializes, it will make the daily job of balancing all the competing needs for water even more difficult than usual. TVA's River Scheduling staff will do their best to provide the maximum public benefits from the water available. And our Watershed Teams and their partners will be on the front lines, working with stakeholders to lessen the impact of weather-related problems.



### In Response to Reader Comments

In the October issue of *TVA River Neighbors*, our cover story focused on questions surrounding the "fall drawdown" of reservoir levels. Several of our readers pointed out that reservoir levels start going down well before autumn, and—of course—they're right.

TVA works hard to have reservoir levels as close to full pool as possible by June 1. After that date, levels can and do fall for a variety of reasons—from water quality and navigation concerns to the need for hydropower generation. Under the guidelines set forth by the 1991 Lake Improvement Plan, drawdowns are limited during June and July in an effort to keep reservoirs above the minimum summer recreation levels shown in the table to the left. Reservoir users can reasonably expect these levels in nine out of ten years on average based on historical rainfall data. Unrestricted drawdown begins on August 1 when TVA begins to release water from reservoirs at a much faster rate.

## TVA Reservoir Levels<sup>1</sup>

	Observed	Targeted Summer	
	April 15 Levels	Recreation Levels	
Tributary Reservoirs	feet	minimum	maximum
Blue Ridge	1676.4	1682	1687
Boone	1376.4	1382	1382
Chatuge	1920.8	1923	1926
Cherokee	1049.7	1060	1071
Douglas	983.5	990	994
Fontana	1682.1	1693	1703
Hiwassee	1505.2	1515	1521
Normandy	874.9	873	875
Norris	1006.2	1010	1020
Nottely	1763.8	1770	1777
South Holston	1717.2	1721	1729
Tims Ford	885.8	883	888
Watauga	1951.7	1949	1959
<b>Main-River Reservoirs</b>			
Chickamauga	683.2	681.5	682.5
Fort Loudoun/Tellico	812.6	812	813
Guntersville	594.4	594	595
Kentucky	358.6	359	359
Nickajack	633.8	632.5	634
Pickwick	413.1	413	414
Watts Bar	736.3	740	741
Wheeler	556.1	555	556
Wilson	507.0	506.2	507.7

<sup>1</sup> Elevations above mean sea level.

## Those Barges Benefit Us All...

### Navigation Aids— Who to Call

To report missing or damaged buoys, hazard markers, or day-boards on recreational channels on the Tennessee River and its tributaries, call TVA at 865-632-4678.

To report missing or damaged navigation aids marking the commercial river channel, call the U.S. Coast Guard. From Paducah, Kentucky, to Paris Landing, Tennessee, call 901-642-4457. Above Paris Landing to Knoxville, call 423-622-2101.

**Q**uick: name some of the benefits provided by TVA's river management system. Flood control, power production, recreation—those are the ones that come readily to mind. But “promoting navigation” was actually the very first objective mentioned in the TVA Act of 1933, which spelled out the purposes for which the newly-created agency was to manage the river. It's been important to the welfare of the Valley ever since...

“Were it not for those barges moving up and down the river, we would be paying more for all kinds of products,” says Ted Nelson, TVA Program Manager for Navigation. “Anything that is made using commodities shipped in bulk quantities—grain, stone and gravel, iron and steel, lumber, coal, and chemicals, for example—would cost more.” These goods would have to be shipped by rail or truck, which experts estimate would cost well over \$400 million a year more than shipping by barge. The result would be higher prices for consumers. Having the river as a

competitive transportation option also helps to keep truck and rail prices down.

And those aren't the only economic benefits, explains Nelson. “Navigation also has contributed—and continues to contribute greatly—to the economic development of the

Valley. For example, the poultry industry in northeast Alabama would not have located where it did without river transportation. And the economies of cities like Decatur and Chattanooga would not be as dynamic as they are today, were it not for the Tennessee River.”

Just one eight-barge tow—fairly typical of what moves up and down the river—can transport as much tonnage as

464 18-wheelers, so water transportation also offers some important advantages in terms of highway safety. Plus, it reduces fuel consumption, air pollution, and the number of tires going to landfills.

### ...But Don't Get Too Close!

A bass boat is anchored in the main channel and a barge tow rounds the bend upstream. The tow can't stop in time to avoid tragedy. The operator of a personal watercraft loses control after jumping the wake of the barge and is sucked under by the vortex created by the tow boat's huge propeller.

Fortunately these kinds of accidents are rare on TVA reservoirs, but they do occur. In fact, both the bass boat and jet ski accidents were real events. Problems usually arise because recreational boaters violate the federal guideline which establishes a minimum 150-foot safety zone around barge tows. The pilots of the tow boats which push these huge barges up and down the river are unable to see vessels that stray too close because of inherent blind spots resulting from the size and shape of the barges. Needless to say, the barge tows are not very maneuverable. After sighting a potential problem, it takes the pilots about a mile to stop their massive tows.

Nelson says TVA does everything it can to prevent these types of incidents. “We maintain a comprehensive system of around 2,500 navigation aids and markers designed to keep recreation traffic in the secondary channel. From buoys, to hazard markers, to day markers—I don't think any other river manager in the country does more channel marking.” The agency also seeks to avoid navigation hazards through its Section 26a permitting process and by sponsoring boating safety exercises designed to keep commercial and recreational vessels apart. Check with your local Coast Guard Auxiliary or Power Squadron for information on boating safety courses.



# Coming Soon to a Lake Near You

It's brand-new. It's exciting. And it could make a real difference in the health of your reservoir.

The Tennessee Valley Clean Marina Initiative is the latest effort by TVA to promote environmentally-responsible marina practices. This voluntary program, established in support of the goals of the National Clean Boating Campaign, will help marina operators protect the very resource—clean water—that provides them with their livelihood.

As part of this Initiative, TVA Watershed Teams and their partners will distribute free copies of *The Tennessee Valley Clean Marina Guidebook* to Valley marinas this summer. The publication will cover a variety of topics—from sewage management and solid waste recycling/disposal to oil and gas control, vessel maintenance/repair, and marina siting, design, and maintenance.

Marinas that adopt a significant portion of the pollution prevention practices recommended in the guidebook will be recognized as “Tennessee Valley Clean Marinas.” They will receive a certificate acknowledging their actions, authorization to use the Tennessee Valley Clean Marina logo on their letterhead and in their advertising, and a Clean Marina flag to fly from their property.

A limited number of cost-sharing incen-



*Employees of Island Cove Marina and Resort on Chickamauga Reservoir assist a boat owner with marine products designed to absorb gas and oil. National Clean Boating Campaign events will be held throughout the Valley from mid-May to mid-July.*

tives will be available for marinas wishing to address sewage management and other pollution prevention practices at their facilities, as outlined by the guidebook.

The Clean Marina Initiative also includes a wide range of educational activities to promote environmentally responsible marina and boating practices, including the distribution of 180,000 clean boating placemats to marina restaurants.

For more information about the Clean Marina Initiative, or to learn about Clean Boating Campaign events scheduled for your reservoir, check with your local TVA Watershed Team.

## TVA Watershed Teams

Boone, Bristol Project, Fort Patrick Henry, South Holston, Watauga, Wilbur:  
**423-239-2000**

Cherokee, Douglas, Nolichucky:  
**423-587-5600 or 865-632-3791**

Norris:  
**865-632-1539**

Melton Hill, Watts Bar:  
**865-988-2440**

Fontana, Fort Loudoun:  
**865-988-2420**

Apalachia, Blue Ridge, Chatuge, Hiwassee, Nottely, Ocoees 1, 2, 3:  
**828-837-7395**

Chickamauga, Nickajack:  
**423-954-3800**

Guntersville:  
**256-571-4280**

Wheeler, Normandy, Tims Ford:  
**256-386-2560**

Pickwick, Wilson, Bear Creek Project:  
**256-386-2228**

Kentucky, Beech River Project:  
**901-641-2000**



## Reservoir Operations Update

**Tennessee River Lock Closures**—The following locks will be closed for scheduled inspection and maintenance: Wilson Main Lock, May 9 through June 5; Guntersville Main Lock, June 12 through June 15; Wheeler Auxiliary Lock, July 11 through July 25; and Watts Bar Lock, September 12 through September 29. At Watts Bar, there is no auxiliary lock available to pass traffic.

**Fontana Drawdown**—TVA will begin lowering Fontana Reservoir to elevation 1575—about 50 to 55 feet below normal—beginning August 1, 2000, for a formal dam safety inspection (required every five years). The inspection work will begin in mid- to late-November and should be completed by January 2001—in time for the reservoir to re-fill to normal levels by spring.

**Whitewater Recreation Release Schedules**—Water releases for whitewater recreation below Ocoee No. 2 Dam began on March 25. Releases are scheduled on weekends through May, five days a week from June through August, and on weekends through November 5. Releases for the Bear Creek Floatway will be provided on weekends from Memorial Day to Labor Day. Call TVA at 865-632-6065 for complete information on recreational release schedules.

### That Personal Touch...

TVA is pleased to announce that the 1-800-TVA-LAND telephone line is now being staffed on weekdays between the hours of 7:30 am and 4:15 pm, EDT. If you need information about how to apply for a permit to build a dock, remove vegetation, install rip-rap, or make other shoreline alterations or have questions about TVA land or landrights, watershed improvement activities, and shoreline clean-up efforts, you may call this toll-free number or your local Watershed Team (listed on page 5). Callers may also make comments and request publications.

For answers to questions on how your reservoir is operated, including reservoir levels and release schedules, call TVA at 865-632-6065.

## Up and Running: New Citizen Advisory Council

**M**embers of the Regional Resource Stewardship Council, formed to advise TVA on issues affecting the Valley's natural resources, met for the first time on March 17 in Chattanooga, Tennessee. The Council consists of 20 members, representing navigation, flood control, power production, water quality, recreation, and other interests. The first meeting was largely devoted to a discussion of guidelines for Council operation. At their next meeting, set for May 25 in Huntsville, Alabama, the Council plans to take a close look at how TVA operates its dams and reservoirs and manages public lands. All meetings are open to the public and include a session for public remarks to the Council. More information on the Council, including a transcript of the March meeting, is available on the web at [www.tva.gov](http://www.tva.gov). You may contact Council members directly or by e-mail through the website. To provide comments to TVA, call 865-632-2333.

### Advisory Council Members

<b>Lee Baker</b> , Newport Utilities, Newport, TN	<b>Thomas Griffith</b> , Mayor, Amory, MS	<b>Elaine Patterson</b> , Olin Corporation, Chattanooga, TN
<b>Jimmy Barnett</b> , Sheffield Utilities, Sheffield, AL	<b>Julie Hardin</b> , Foothills Land Conservancy, Knoxville, TN	<b>Bruce Shupp</b> , B.A.S.S. Inc., Montgomery, AL
<b>Roger Bedford</b> , State Senator, Russellville, AL	<b>Al Mann</b> , Retired pharmacist, Benton, KY	<b>Eddie Smith</b> , Mayor, Holly Springs, MS
<b>Austin Carroll</b> , Hopkinsville Electric System, Hopkinsville, KY	<b>Bob Matheny</b> , Sequatchie Valley Electric Co-op., South Pittsburg, TN	<b>Stephen Smith</b> , Southern Alliance for Clean Energy, Knoxville, TN
<b>Phil Comer</b> , Land Owners & Users of Douglas, Dandridge, TN	<b>Miles Mennell</b> , Association of TN Valley Governments, Nashville, TN	<b>Jim Sutphin</b> , Farmer and businessman, Rose Hill, VA
<b>Ann Coulter</b> , RiverValley Partners, Chattanooga, TN	<b>Herman Morris</b> , Memphis Light, Gas & Water, Memphis, TN	<b>Paul Teague</b> , Retired physician, Parsons, TN
<b>Bill Forsyth</b> , Murphy Power Board, Murphy, NC	<b>W. C. Nelson</b> , Nelson Tractor Company, Blairsville, GA	

## Mosquitoes—What to Expect

**W**hat's the outlook for mosquitoes this summer in the Tennessee Valley? Hard to say, at this point. The major factor will be the amount of rainfall and runoff we receive this spring and summer, which is hard to predict. If long-range forecasts for continued drought conditions are right, we can expect low mosquito populations. However, even if conditions are unusually dry, the Asian tiger mosquito is likely to cause some local problems.

Homeowners can help eliminate mosquito breeding habitat by removing containers that hold water such as tires, buckets, and flower pots; changing your pet's water dish frequently; and filling in

ditches not used for drainage.

As usual, TVA will begin fluctuating water levels on four main-river reservoirs in June to strand mosquito eggs and larvae on the shore where they dry out and die. We also offer technical assistance to local governments and conduct mosquito monitoring throughout the Valley. Good news: nearly all localities checked last year were free of mosquitoes infected by typical viruses. With concerns among public health officials that the newly-introduced West Nile virus could spread from New York City southward, we are adding a new DNA-based method to our analysis to identify mosquitoes that could be carriers of this disease.

# TVA Campgrounds and Recreation Areas:

## A Good Deal, and a Good Deal Better

Summer's almost here, and TVA campgrounds and recreation areas are better than ever. TVA operates about 100 public recreation areas throughout the Valley, and many have undergone improvements since last year.

They're also a good value for families looking to stretch their recreation dollar. "This year we will be holding fees at last year's level and providing additional improvements for public enjoyment," said TVA Resource Stewardship Vice President Ruben Hernandez.

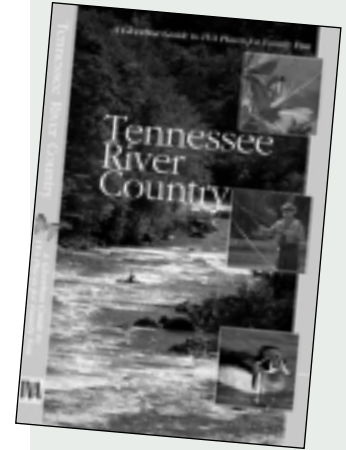
Camping fees are still \$11 a day for sites without water and electric hookups and \$15 a day for sites with hookups. A fee of \$50 is charged to reserve group picnic pavilions. Holders of Golden Age and Golden Access Passports (available at most federally-operated recreation areas) receive a 50-percent discount on camping fees.

While TVA's day-use areas and boat launch ramps are available at no cost to the public, recreation areas managed by private operators or public agencies through a partnership arrangement with TVA may charge fees for boat launching and day-use to help cover maintenance expenses.



### Improvements at TVA recreation areas include:

- ▶ **New courtesy piers** at the boat ramps above Watauga, Cherokee, Chickamauga, and Wilson Dams; at the tailwater ramps below Guntersville, Melton Hill, Fort Loudoun, and Hiwassee Dams; at the Shellmound recreation area and the Guild, Cole City Creek, and Grand Canyon boat ramps on Nickajack Reservoir; and at the Loyston Point recreation area on Norris Reservoir.
- ▶ **Water and electric hookups** at the campgrounds at Pickwick Dam, Barton Springs on Normandy Reservoir, and Loyston Point on Norris.
- ▶ **Walking trails** at Douglas and Chatuge Dams and a boardwalk at the Maple View wildlife viewing area on Nickajack Reservoir near Nickajack Cave.
- ▶ **A new picnic pavilion** at Chickamauga Dam.
- ▶ **New restroom facilities** at Fort Loudoun Dam and renovation of restrooms at Mallard Creek recreation area, the fishing area on the left bank below Nickajack Dam, and at Hiwassee Dam.
- ▶ **New wastewater disposal stations** at Melton Hill Dam and Cherokee Dam campgrounds.
- ▶ **Paved parking areas** at the Boone Dam ramp, the Preston boat ramp on Guntersville Reservoir, and the canoe access area below Blue Ridge Dam.
- ▶ **New children's playground equipment** at Cherokee and Douglas Dams and at the Loyston Point recreation area on Norris.



### New Recreation Guidebook Available

Everything you always wanted to know about having fun in and around TVA reservoirs—all in one convenient, attractive package.

TVA has just published *Tennessee River Country: A Guidebook to TVA Places for Family Fun*. This 102-page comprehensive guide to outdoor recreation opportunities at TVA reservoirs features:

- full-color photography
- regional and local maps
- information on outdoor activities at 35 public recreation areas
- notes on plant and animal life
- important safety tips for enjoying recreation near TVA dams

The guide can be purchased for \$10 from Barnes & Noble, B. Dalton, and Books-A-Million bookstores, and can be ordered through the mail from TVA by calling 865-632-4220 in Knoxville or 423-751-7904 in Chattanooga.

## TVA Hydro Plant Receives Award

The National Hydro Association (NHA) has awarded TVA's Norris operations its "Outstanding Stewardship of America's Rivers" award for 2000. This award recognizes "projects demonstrating significant environmental accomplishments." Efforts to enhance the quality of releases at Norris through aeration and minimum flows and activities to improve conditions in the surrounding watershed have resulted in dramatic improvements for downstream aquatic life. TVA's South Holston Hydro Plant received this recognition in 1999. Both projects are part of TVA's Reservoir Releases Improvement program, which has improved conditions in more than 300 miles of rivers below TVA dams.

If you have a new address or no longer want to receive our newsletter, please contact:

## TVA River Neighbors

Tennessee Valley Authority  
Post Office Box 1589  
Norris, Tennessee 37828

# Planning for the Future of Public Lands

**H**ow do you go about managing almost 265,000 acres of public land? It helps to have a plan—a plan that involves input from stakeholders.

That's TVA's goal in reservoir land planning: to identify land that's best suited to specific uses and manage it with an eye toward creating sustainable watersheds, maximizing public benefits, and balancing competing demands. Land plans are designed to integrate a variety of resource management goals—everything from protecting and improving the environment to promoting economic development and meeting public needs for recreation.

Plans are currently being developed for public land around five TVA reservoirs. Plans for Bear Creek, Tellico, and Tims Ford will be completed this year; plans for

Cherokee and Norris will be completed in early 2001. Each of these plans will be formulated with significant input from Valley residents, public agencies, and private organizations. Public "scoping" sessions help to ensure that reservoir land plans address issues of interest to the stakeholders.

Plans already are in place for nine reservoirs: Boone, Chickamauga, Guntersville, Kentucky, Melton Hill, Nickajack, Pickwick, Watts Bar, and Wheeler. The Guntersville plan is being updated this year.

For more information on how you can participate in TVA's reservoir land planning process, or for details on a specific land plan, call 1-800-TVA-LAND.

Phone: 865-632-1663  
Fax: 865-632-1534

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