



**HARPETH RIVER  
WATERSHED  
ASSOCIATION**

*"Working together to protect  
and restore the Harpeth River"*

## Hootenanny

**"an informal  
performance by folk  
singers, typically with  
participation by  
the audience."**

**The Harpeth River  
Watershed Association  
invites you for a  
rockin' good time at**

### **THE HARPETH RIVER HOOTENANNY**

**Friday, September 17, 2004  
6:30 - 11 p.m.**

Hosted by Orrin Ingram  
at Riverview Farm  
1475 Moran Road, Franklin

Barbeque Dinner  
by McConnell's Catering

Musical Entertainment  
by Deborah Allen, Susie  
Coleman, and Jack Grant

Silent Auction

Tickets: \$100 - Individual  
\$150 - Couple

### **SPONSORS**

Orrin Ingram  
R.S. Lipman & Company  
Waller Lansden Dortch & Davis  
Woodie Knight,  
Photographer

# Voices for the Harpeth

Issue No. 3, 2004

## **Restoring the Harpeth River, One Stream at a Time**

by Gwen Blanton, Environmental Specialist

HRWA's River Restoration Program has been in full swing this season! If you read last November's *Voices for the Harpeth*, you already know that reforestation of stream banks (also called restoring a riparian corridor) is an important part of maintaining the health of our river. We re-establish a complex network of roots that helps hold streambank soil in place during high water flows, filter pollutants from runoff, provide shade for the stream and leaf litter (food for aquatic insects which are in turn food for the fish). These efforts reduce erosion and pollution as well as helping to minimize the chances of flooding during heavy rains. By letting streambanks grow wild again, giving each bank a No-Mow Zone, and planting trees to recreate lost forests, individuals throughout the watershed are working with HRWA to ensure long-term water quality improvements.

Volunteers from  
Congregation Micah plant  
trees along the Little  
Harpeth and along the  
Harpeth River at the  
Narrows.



In 2003, HRWA's River Restoration Program completed seven projects with the help of our fabulous Volunteer River Restoration Corps and we would like to thank all the individuals who came out and demonstrated their personal interest in making a difference — we couldn't do it without you!

### **2004 Projects**

The first half of 2004 was busy and very productive! We worked with a fourth grade class at Battle Ground Academy to help them plant their free Arbor Day trees, provided by Keep Williamson Beautiful, on school property. The kids were very excited to be helping

*Continued on page 2*

**A VERY SPECIAL THANKS  
to the supporters of the  
River Restoration Program  
and its Volunteer River  
Restoration Corps:**

The Atticus Trust  
Brentwood Parks Department  
Kyle Duvall (equipment)  
Nancy James (equipment)  
Congregation Micah's Fifth Grade  
class—funds and volunteer hours  
Keep Williamson Beautiful (Carolyn  
Gallagher coordinated Arbor  
Day trees)  
Tennessee Scenic Rivers Association  
TN Dept. of Agriculture – Nonpoint  
Source Program with a multi-year  
grant for watershed restoration,  
planning and outreach.  
TN Wildlife Resources Agency—  
Clean Streams Grant

***The VRRC is a joint effort with the  
Tennessee Scenic Rivers Association  
to provide people power, materials,  
and expertise to restore stream  
health in the Harpeth and Duck  
River watersheds.***

**Web Site Hosting by ISDN-NET**

The HRWA web site and email service is generously hosted and provided free by ISDN-NET as part of its commitment to water quality improvements of the rivers that brought life to the Middle Tennessee Basin, and its ongoing efforts to use communication technology to re-create community.

**Voices for the  
Harpeth**

NEWSLETTER TEAM: **PETER JORDAN,  
DORIE BOLZE, JULIA HALFORD**

NEWSLETTER LAYOUT: **MARY CAPRIO  
CAPRIO DESIGNWORKS, 838-3702,  
MFCAPRIO@COMCAST.NET**

WEB MASTER: **DON GREEN**

CONTENTS © 2004 BY HARPETH  
RIVER WATERSHED ASSOCIATION UNLESS  
OTHERWISE NOTED. PERMISSION IS GRANT-  
ED TO COPY THESE ARTICLES PROVIDED  
THAT ORIGINAL SOURCE IS CREDITED.

*Continued from page 1*

their local river (the Harpeth main stem in Franklin) and worked in pairs to plant and water each tree.

**Stabilizing Banks in Brentwood**

On March 6 we continued our work at Brentwood's Tower Park by planting 300 more trees with the help of nine volunteers, and did a Rapid Stream Assessment on March 20th with 20 volunteers from the VRRC (Volunteer River Restoration Corps) walking three miles of the Little Harpeth River. With digital cameras, GPS (global positioning system) units and clipboards in hand, they got their feet wet (if they wanted to!) and assessed the state of the Little Harpeth as it runs through several parks in Brentwood. The scientific data they gathered will be used as the basis for future restoration projects. We discovered some issues during that survey that we have already begun fixing by installing cedar revetments (cedar trees, with their dense branches, are laid along the streambank) to help stabilize and rebuild eroding banks, especially under the roots of large trees where high water has washed away the soil that trees need to be healthy. Our cedar revetments will help these trees and protect the banks they grow on. This work on the Little Harpeth was supported by the Brentwood Parks Department.

**Reforestation the Little Harpeth**

This past spring we worked with members of Congregation Micah to help them reforest nearly 400 feet along

the Little Harpeth River and they brought over 25 volunteers to help get the trees in the ground! Jeremy Morrow and his mother Lisa really made this a success by pulling together so many enthusiastic volunteers who wanted to help the river.

**Slowing Down Erosion**

On a hot summery Sunday at the end of March, 40 volunteers gathered at the Narrows of the Harpeth and planted about 1,200 trees (sycamore, bald cypress, cottonwood and silky dogwood) to reforest a half-mile stretch of riverbank. Their work rebuilt a 100' buffer zone to help stabilize the eroding bank, filter pollutants from stormwater runoff and provide food (leaf litter) for the aquatic insects that fish eat. The Narrows of the Harpeth is highly trafficked by fishermen and paddlers each year and many of the streambanks along that five-mile stretch of river are severely eroded. HRWA's River Restoration Program is helping to fix that. A special thanks to Mike Campbell, the landowner who has been working enthusiastically to restore the river's forest buffer and to the fifth grade class (and their parents) of Congregation Micah — you all made the day a huge success!

**And There's More...**

The Volunteer River Restoration Corps also worked in the Duck River watershed this spring planting nearly 1,500 trees on Aeon Creek and an unnamed tributary to McCutcheon Creek in Spring Hill as part of the Tennessee Scenic Rivers Association's Duck River Project. Our work contin-

ues in Franklin, on North Ewingville Creek, in Tower Park, in Spring Hill and other locations around the Harpeth and Duck River watersheds. The Volunteer River Restoration Corps has worked overtime this year and it's making a big difference in the health of the river.



Volunteers do a Rapid Stream Assessment on the Little Harpeth River in Brentwood.

# CALENDAR OF EVENTS

Saturday, August 21

## Small Stream Restoration Project

Join us on a new streambank stabilization project on an unnamed tributary to McCutcheon Creek in Jerry Erwin Park in Spring Hill. This project is in partnership with TSRA's Duck River Project. Call (615) 790-9767 or e-mail [hrwa@harpethriver.org](mailto:hrwa@harpethriver.org) for more information.

Friday, September 17

## Harpeth River Hootenanny

6:30 - 11:00 p.m.

Join us to celebrate the work of the HRWA with live entertainment by Deborah Allen and others, a barbeque and a select silent auction. This fun event will be near the Harpeth River on the private property of Orrin Ingram and will benefit the Harpeth River Watershed Association so we can continue our hard work. Tickets will be \$100 per individual or \$150 per couple. **Please join us for the relaxing and fun Harpeth River Hootenanny!**

Saturday, September 25

## Mound Bottom Tour at Montgomery Bell State Park

9:00 a.m. -12:30 p.m.

Meet at the Montgomery Bell State Park Visitors' Center and join us on a Mound Bottom tour as part of Tennessee Archeological Awareness Week. Enjoy a guided tour of Mound Bottom, Mace Bluff and Paint Rock courtesy of our new board member, Maury Miller. Bring your picnic lunch to enjoy on the grounds. **\*Slight fee for this event.**

Saturday, October 16

## Historical Tour of Montgomery Bell State Park

9:00 a.m. - 5 p.m.

Meet at Montgomery Bell State Park Visitors Center for an **all day tour** which includes Montgomery Bell's burial place, Narrows of the Harpeth Tunnel, Worley Furnace, Valley Forge, and Rock Church. Bring your picnic lunch. **\*Slight fee for this event.**

## Fees For the Hikes and Tours:

### HRWA Members:

\$10 individual  
\$20 family

### Non-members:

\$20 individual  
\$40 family

Please consider becoming a member of the Harpeth River Watershed Association — turn to page 4 for a membership application.

### FREE GIFTS AT EACH MEMBERSHIP LEVEL:

\$25 Free TN River Poster & bumper sticker

\$35 Free T-Shirt and poster

\$45 Family Membership:  
2 free T-Shirts and all posters

To register for any of these events or to find out more, call Julia Halford at (615) 790-9767 or email us at [hrwa-office@harpethriver.org](mailto:hrwa-office@harpethriver.org).

## Become a River Rat! Join the Volunteer River Restoration Corps

Over 250 volunteers have already planted an astounding 15,000 seedlings as part of the Volunteer River Restoration Corps (VRRRC), a joint effort of the HRWA and the Tennessee Scenic Rivers Association's Duck River Project.

"School groups, scouts, property-owners, HRWA and TSRA members, and other river-lovers are becoming river rats and joining the VRRRC program," says John McFadden, HRWA director for science programs. "It's a great way to make a difference and give something back to the rivers we all enjoy."

In addition to planting the 15,000 trees, volunteers have installed cedar revetments and worked on other projects to improve the "riparian zone," the streamside area that is the most important factor in the ecological health of a creek.

"Joining the VRRRC is a chance to get out into the watershed, see problems first-hand, and be part of the solution," says McFadden. "Everyone is welcome. Contact us, then bring your shovels and buckets, your church group, scout troop, classroom or neighborhood organization, and come on out to the river."

**Ready to get your feet wet? Turn the page and fill out the contact card or email us at [hrwa@harpethriver.org](mailto:hrwa@harpethriver.org).**



**HRWA STAFF**

**FRONT ROW:**

- ALYN BAGGETT — Membership Coordinator & Program Assistant
- GWEN BLANTON — Environmental Specialist & Volunteer Coordinator
- JULIA HALFORD — Special Events Coordinator

**BACK ROW:**

- DORENE BOLZE — Executive Director
- KYLE DUVALL — Director of Development and Special Projects
- JOHN MCFADDEN — Director of Science and Restoration Programs

**HRWA BOARD OF DIRECTORS**

- EL COX, PRESIDENT  
Clinical Chemist, Vanderbilt University Medical Center
- DAVID LEMKE, VICE-PRESIDENT  
Attorney at Law, Waller Lansden Dortch & Davis
- MATT DOBSON, TREASURER  
Commercial Real Estate Financing, Aegis Group
- PAM BOLEN, SECRETARY  
Vanderbilt Ingram Cancer Center
- RICK LOCKWOOD  
Ecotoxicologist, Advent Group
- SCOTT DAVIS  
Executive Director, Nature Conservancy of Tennessee
- STACEY WATSON MCRIGHT  
Director of Community Relations, Stites & Harbison
- PHIL PACE  
President, Floreat Inc.
- MAURY MILLER  
Dickson County Environmental Board
- MIKE WALTON  
Walton's Antique and Estate Jewelry

***The Harpeth — it flows through our lives. We all live downstream.***

The Harpeth and its tributaries drain 872 square miles. While much of it is still forested or agricultural, another third is one of the fastest growing regions in the United States. We need your help to preserve and restore the ecological health of this watershed. Please join the Harpeth River Watershed Association and get involved!

✓ ***Yes, I want to support and join the efforts of others with the Harpeth River Watershed Association. Please send me the Harpeth River color map and free TN river poster of my choice:  small stream,  stream, or  river ecosystem.***

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: Day \_\_\_\_\_ Evening \_\_\_\_\_  
 Email: \_\_\_\_\_

**Volunteer Interests:**

- River studies and restoration projects
- Education projects
- Special events/Recreation
- Helping in the office
- Other \_\_\_\_\_

**Sponsorship Levels:**

- \$25             \$100
- \$35\*          \$250
- \$45\*          \$500
- \$50            \$1000
- Other

***Consider including the HRWA in your estate planning ... (See page 6 for more information.)***

Please send me more information about including HRWA in my will.

***Pay by credit card online at [www.harpethriver.org](http://www.harpethriver.org)***

**\* Donations of \$35 or more receive a free HRWA t-shirt. The \$45 family membership includes 2 T-shirts, a set of TN river posters, and wildlife trading cards (while supplies last).**

Please make checks payable to the Harpeth River Watershed Association and return this form and your contribution to: ***Harpeth River Watershed Association, P.O. Box 1127, Franklin, TN 37065***

For more information, call 790-9767 or visit [WWW.HARPETHRIVER.ORG](http://WWW.HARPETHRIVER.ORG).

*The HRWA is a 501(c)(3) non-profit organization and contributions are tax-deductible.*

# 2004 River Steward Awards

## Recognizing Leaders in Service to the Harpeth

The Harpeth River Watershed Association presented the 2004 River Steward Awards at our RiverSmart Festival and Annual Meeting on April 18, honoring the following individuals and organizations for their dedicated efforts at protecting and restoring the health of the Harpeth.

We want to thank **St. Paul's Episcopal Church, GroWild, Louis Levine, Rick Lockwood, Tim Diehl, and Jennifer Stewart-Wright** for helping make the RiverSmart Festival such a wonderful time!

### *Volunteer Extraordinaire:*

**Mike Walton of Walton's Antiques and Jewelry** — for outstanding support of HRWA as President by donating office space for three years, participating in our many projects and studies, taking on whatever needed to be done, and providing a guiding light.

### *Individual:*

**Don Green, City of Franklin Stormwater Coordinator and HRWA Web Master** — for excellence in designing and maintaining HRWA's user-friendly and informative web site.

### *Individual:*

**Ed Snyder, Field Studies Volunteer** — for outstanding effort in both the HRWA Visual Stream Habitat Assessment across the watershed and the HRWA Bank Erosion Study.

### *Elected Official:*

**Dan Klatt, Alderman City of Franklin** — for his leadership in working with the city's senior staff and mayor to establish Franklin's Harpeth River Task Force that will explore cost-effective means for the city to protect water quality.

### *Federal Government Official:*

**Tim Diehl, United States Geological Survey** — for participating in the design and analysis

on the joint HRWA and Cumberland River Compact Harpeth River Sediment Study, HRWA bank erosion study, and important role as technical advisor.

### *Local Government Official:*

**Robert Karesh, Williamson County Stormwater Coordinator** — for all his efforts to launch and coordinate a statewide working group among nearly 100 municipalities that now need to regulate stormwater in order to share information and develop similar approaches.

**The following awards were presented on behalf of the Volunteer River Restoration Corps, a joint project of the Harpeth River Watershed Association and the Tennessee Scenic Rivers Association's Duck River Project.**

### *Individual:*

**Patty Shultz, Restoration Volunteer** — For outstanding consistency as a Volunteer River Restoration Corps member in stream restoration projects.

### *Community Group:*

**Congregation Micah** — for the dedication of the fifth grade class to the restoration project on the Narrows of the Harpeth and for undertaking their own restoration project along the Little Harpeth on the synagogue's property.

### *Corporation:*

**Saturn Corporation** — for their consistent financial support and the commitment of their staff as mentors to the middle and high school classes involved in the Duck River Project.

### *Developer:*

**Jim Carell, Achiever Development Corporation** — for the design of Chapman's Retreat residential subdivision that maintained a stream buffer zone and has been a

restoration project to re-vegetate the streamside habitat along Aeon Creek in Spring Hill.

### *State Government Official:*

**Cynthia Rohrbach, TDEC Green Schools Program Coordinator** — for service above and beyond the call of duty both in the classroom and in the field to help school children learn about and monitor long-term water quality with the Duck River Project.

### *Agriculture:*

**John and Mona Lee** — for maintaining a forested stream buffer along Rutherford Creek on their farm outside Spring Hill.



River Steward award winner Patty Shultz jumps in to river restoration projects with both feet.

# **An Infectious Passion for the Health of the Watershed**

## **Ed Snyder: Walking the River, Honoring the Spirit**

by Peter Jordan

As Thoreau says in Walden, “there is nothing inorganic.” If Thoreau didn’t say it first, Ed Snyder might have coined the phrase.

“You can’t separate people from their world,” says Ed Snyder. “It’s all one interactive system. So if you care for people and other creatures, you have to care what they breathe, drink, see, and live.”

Snyder, 70, like many HRWA volunteers, believes working for the health of the Harpeth is more than just community service — it’s a spiritual calling.

“The human body and brain can’t function well when they’re full of poisons,” Snyder believes. “The serenity that comes from experiencing some quiet and beauty has to be good for mental health.”

After six years as a Presbyterian (USA) minister, followed by a career as a social worker, Snyder knows plenty about both mental and spiritual health. “Christians talk a lot about ‘salvation,’ ” he says. “The root — *salvus* — means wholeness and wellness.”

Part of Snyder’s *salvus* is Watson Branch, a Harpeth River tributary that



runs by his Riverview Park home. He and his dog enjoy the stream, and he’d like to see the whole watershed be more central to the lives of the citizens of the six surrounding counties.

“I’ve traveled just a bit in Europe and was very impressed that in the cities there, a river is a scenic and cultural centerpiece,” says Snyder. “It’s a shame that in Franklin — and I suspect in the U.S. in general — we ignore our rivers. In Los Angeles, the river is even cemented into a channel.”

Snyder doesn’t think his volunteer work for HRWA is anything special, but he has worked on two HRWA projects, including the training sessions for both. The first involved checking riparian

zones at several sites on the Harpeth and its tributaries as part of the Visual Stream Assessment. Snyder’s assignment included checking vegetation and water appearance, taking photos, noting GPS coordinates, and assessing litter. Since Watson Branch was one of the streams he checked, the work took on special meaning.

The former minister is involved in the HRWA Bank Erosion Study, marking out two sites with his wife Paula and taking measurements to help determine how fast Middle Tennessee dirt is washing down the Harpeth and into the Cumberland.

Even though Snyder has only been involved in two HRWA projects to date, his passion for the health of his watershed is infectious. “As an adult, I’ve come to recognize that some of life’s essentials — air, water, soil — are absolutely irreplaceable and are fast getting so ruined that every creature on earth will suffer, so I try to do just a little about the river near me, and I try to be one of the voices crying in the wilderness to get people to think and act about what they eat, drink, and breathe.”

### **Saving the River Through Planned Giving**

**By Robert V. Bolen**

To promote charitable giving, the government offers several ways to lower your taxes while giving to the charity of your choice. In essence, Uncle Sam has something of a matching program and will donate along side you to help save the Harpeth River. Regarding a straight gift, it is tax-wise to donate highly appreciated assets, such as stocks or real estate, rather than cash. The tax deduction is the fair market value of the stock, not the cost basis. This way, capital gains tax can be avoided altogether. The IRS imposed maximum annual donation to the HRWA for appreciated assets is 30% of adjusted gross income and your financial advisor should be consulted for specifics.

More sophisticated planned giving techniques include Charitable Remainder Trusts (CRT) and Charitable Lead Trusts (CLT.) With a CRT, you donate assets to the trust making the HRWA the “remainder” beneficiary. The donor receives an income stream from the trust for some specified period of time (often until the donor’s death) and receives an immediate tax deduction equal to the present value of the gift. If the income is not needed by the donor, it can be used to pay for a life insurance policy to replace the value of the donation, which might make the estate beneficiaries more agreeable to the gift. With a CLT, the income stream goes to the HRWA and the asset itself would go to a beneficiary (typically a child of the donor) after some defined period. An asset that would be donated into a CLT should be a quickly appreciating asset that is expected to grow faster than the income stream to the charity, thereby shifting estate assets to the next generation in a tax efficient manner. Again, your financial advisor should be consulted to discuss the finer points of these planned giving strategies.

*Robert V. Bolen, CFA, CFP, is president of Bolen Asset Management, a Franklin based investment management and financial planning firm. He can be reached at 790-0765 or bob@bolenasset.com.*

# Kyle Duvall Dives in as Development Director

by Peter Jordan

On a macro level, the Harpeth River Watershed Association's new director of development and special projects dreams of raising thousands of dollars through capital campaigns and fund-raising concerts and of bringing together elected officials and other leaders from throughout the six-county watershed.

On a micro level, Kyle Duvall is taking care of the ecology of his own little back yard.

## Managing the Big Picture

Both macro thinking and micro thinking are important to the health of our Middle Tennessee ecology and the river that runs through it.

On the macro level, Duvall hopes to build the association's financial clout, membership, and public awareness so that when HRWA speaks, Middle Tennessee will listen.

"We're working to identify the kinds of folks who are policy makers like city leaders, planners, county commissioners, and other people who can make a difference," says Duvall. "If we're going to affect water quality, we need to get to the policy makers. From the mayor of Williamson County to the mayor of Pegram, it's all about education and awareness."

Duvall is organizing a series of roundtables for the leadership of the six-county area to help those leaders learn about the water quality issues involved in policy decisions like land use planning, subdivision regulations, and storm-water requirements. "That river runs through 125 miles of six counties. We need to position ourselves as a regional presence," he comments.

He's also hoping to increase the HRWA's clout with an expansive development effort that will bring in major donors and increase the organization's annual giving campaign. He eventually plans to have at least one major fund-raising concert a year for the Harpeth River Watershed Association. Kyle's fund-raising background includes his work as a Development Associate with

Belmont University as well as service on Governor Phil Bredesen's finance committee.

## Focusing on the Details

Duvall knows it's the collective effort of thousands of middle Tennesseans paying attention to the details of their environment that will truly determine our watershed's health.

But even though Duvall has a big picture view of HRWA's future and the financial support it will take to get it there, he also stays focused on the details, including his 4,500 square foot lot in Fieldstone Farms. The National Wildlife Foundation has certified his back yard as an official wildlife oasis, thanks to the care Duvall and his wife Emily have taken to create a welcoming habitat for wildlife.

"We used to live in a house that backed up to the Harpeth and had huge gardens and habitat," says Duvall. "When we down-sized to a smaller house, we decided to see what we could do with 4,500 square feet of land. It turns out there's a lot you can do. Even the kinds of trees and bushes you plant can make a difference in attracting wildlife."\*

From his landscaping to his blue-bird houses, Duvall has created a microenvironment that is wildlife-friendly, as a resident family of rabbits happily attests.

"It's all about awareness," Duvall believes. "In pioneer times, we settled around waterways, and we knew that water meant life, but today we turn on faucets and we have indoor plumbing, so we're not as connected as we once



Kyle Duvall explores the coral reef at Grand Cayman.

were, and we forget that we all live downstream. But water quality should be important for all of us. From the way we plant and drain our yards to grass roots membership in the HRWA to participation in major events like the Harpeth River Hootenanny and our capital giving campaign, we can all make a difference in the health of the watershed."

If Duvall sounds as if he's preaching, that's no accident. He has a background in the ministry and firmly believes that environmental causes have a spiritual dimension.

But his interest in preserving the ecology of middle Tennessee isn't just Biblical: it goes back to his grandmother in Louisville, whose roots were in her garden. She was a "person of the earth," he recalls.

Duvall is not only a person of the earth (witness his back yard); as a registered SCUBA diver and certified underwater naturalist, he's also a person of the water. Though he hasn't yet dived the Harpeth, if HRWA science director John McFadden needs some critter-counting, Duvall will charge up his tanks and jump in.

\*Visit [www.nwf.org/backyardwildlifehabitat](http://www.nwf.org/backyardwildlifehabitat) for info on how to make your yard wildlife-friendly.

# Harpeth River Stewardship Council: Your Commitment Makes a Difference

by Kyle Duvall, Director of Development  
and Special Projects

## **You Made It Happen!**

The HRWA exceeded our goal of \$50,000 for 2003! Yes, more than 60 people and businesses who are concerned for the ecological health of the Harpeth River came together during 2003 to put us over the top! Thank you Stewardship Council members for your support!

Our influence as an organization is growing, our needs are great, and there is much work to do. The Harpeth River Stewardship Council, a group of committed individuals and businesses, leads the way financially in support of the mission of the HRWA with tax-deductible donations ranging from \$250 to \$10,000. We need your continued support to reach our goal of \$75,000 in 2004. If you are not a Stewardship Council member, then please consider becoming one by making a tax-deductible gift to the HRWA of \$250 or more to strengthen and sustain our growth as an organization... You made a difference in 2003! Let's continue to make a difference in 2004!

## **"25 for 25" Major Donor Campaign Now Underway**

"25 for 25" is a fundraising campaign effort focused on identifying twenty-five donors who will contribute \$2,500 or more to the HRWA. A number of individuals and businesses have already "stepped up to the plate" to make these commitments and help the HRWA reach our goal of raising \$75,000 during 2004.

Your support in this effort will go a long way in helping the HRWA increase our regional presence in our efforts to restore, preserve and protect

the Harpeth River and its watershed throughout Middle Tennessee.

## **HRWA Establishes Stock Account**

The HRWA recently established a stock account to give our supporters another way to make a tax-deductible charitable contribution to the HRWA. Please contact the HRWA office for more information at (615) 790-9767. **A big THANK YOU goes to Bob Bolen for his assistance in establishing the HRWA stock account! See Bob's article on page 6 for more information.**



## **A Challenge is Made and Met!**

In March, an incredibly generous member made a \$20,000 donation to the HRWA for two years for a total of \$40,000, **if TWO other individuals or organizations in 2004 would take the challenge — a \$20,000 tax-deductible contribution to the HRWA for two years for a total of \$40,000. IN AUGUST WE MET THE CHALLENGE. This means that the HRWA will receive a total of \$120,000 during the next two years from three members who stepped forward to meet the challenge.** Will you help us continue our work and influence as an organization? Our development as an organization depends on your generosity!



## **Our Thanks to the Special Event Sponsors who Raised Funds and Awareness for HRWA in 2003/2004:**

### ***"Documenting the Vanishing Landscape 2003: Plein-Air Painting along State Route 840"***

The Chestnut Group members captured on canvas scenes of land threatened by State Route 840 cutting along the vital pristine headwaters of the Harpeth. The proceeds of the art sale that ran through January raised \$1,400 for HRWA.

### ***Roundtable Events***

This spring, HRWA hosted Roundtable Events for both the City of Franklin officials and staff as well as the Williamson County officials and staff. These Roundtables gave HRWA the opportunity to present information on land development as it relates to the water quality of the Harpeth River. Many thanks to Stites and Harbison for sponsoring one event and to Andrews Appraisal Services, Inc., and Land Design, Inc., for co-sponsoring the other. These sponsorships helped us leverage support from our state grant.

### ***Blackberry Jam at the Farm of Dale Whitehead & Carol Warren***

Dale and Carol, who hosted a day of music at their farm on the West Harpeth on May 15, invited HRWA to set up our membership table and inform the audience about our mission several times throughout the concert.

### ***Guided hike along Kelley Creek***

Paul and Margaret Sloan graciously allowed HRWA to sponsor a guided hike of this ecologically significant creek system led by John McFadden on their property on July 10.

*Canoe Music City* gave participants on our Narrows of the Harpeth guided float a discounted group rate on July 11.

# **www.harpethriver.org**

**A "one-stop shop" for information on HRWA's current projects, ways you can help the river, volunteer opportunities, fundraising, special events, and more.**

# Save Water, Help the River

## Practical Conservation Tips for Homeowners

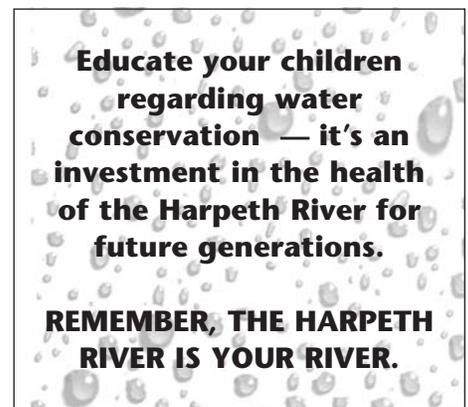
by Eddy D. Bateman III, Field Assistant

Water use in residential homes of the Harpeth River Watershed makes a huge impact on the health and vitality of the river. The more water we use, the more water must be taken from the Harpeth River, the Cumberland River, or the Duck River. By saving water on a personal basis, we can all be stewards of the beautiful Harpeth River — and benefit at the household level from lowered water bills. The following tips will help you save water (and money) in and around your home:

- **Replace old toilets.** Toilets are the largest single use of water in a home. Look under the lid of your toilet to see the date of manufacture stamped into the body of the toilet. If it was made before 1992, replace it with one of the new “low flow” toilets now mandated by law. Eventually it will pay for itself by lowering your water bill.
- **Check your toilet for leaks using the dye test.** Place a few drops of food coloring into the tank of your toilet. Check the bowl in 15 minutes. If you see any trace of the dye in the bowl, your toilet leaks and you should replace the flapper. (Chemicals used to clean toilets are the most common cause of deformed and leaky flappers.) The best time to perform the test is in the early a.m. hours of the night. Many toilets do not leak during the day as water use in the community is at peak levels during those hours. Overnight, water use goes down since most people are asleep and this allows for increased water pressure in the municipality’s water lines. Increased pressure in the lines may cause appliances to leak at night even if they don’t leak during the day.
- **Replace your clothes washer** (the second largest area of home water use) with an Energystar-rated clothes washing machine. These use 30% to 50% less water per load, and require 50% less energy per load. Many city water companies provide financial incentives towards the purchase and installation of Energystar appliances, although the city of Franklin currently does not. Energystar appliances eventually pay for themselves with the savings on your utility bills.
- **Replace your showerhead with a low flow showerhead.** Showers are the third largest use of water in residential homes. Many water-saving showerheads offer a switch or button which can be engaged to temporarily shut off water while you lather up. Also, be more conscious of the length of shower you take.
- **Check your entire home for leaks.** 10% of water waste in homes is due to leaks. A single dripping faucet wastes an average of 2,000 gallons of water per year, and a leaky toilet wastes an average of 200 gallons per DAY!
- **Only run the dishwasher and clothes washer when fully loaded.**
- **Defrost food in the microwave or refrigerator instead of running water over it.**
- **Use two basins when handwashing dishes** (one to wash and one to rinse) instead of leaving the water running continuously. If the rinse water is hot enough, your dishes will dry in a couple of minutes.
- **Do not leave the water running while you brush your teeth.** This is a simple but effective way to reduce water usage. Imagine the water savings over the course of a year.
- **Aerate your lawn.** This helps the lawn to soak up more rainwater, increases the health of grasses, and reduces irrigation costs. It also decreases the amount of runoff from your lawn, increasing the health of the Harpeth River by reducing the potential for flash flood events. Flash floods cause valuable property loss and damage due to stream bank erosion.
- **When watering your lawn, do not water during the hottest part of the day.** Also, do not water on very windy days. Both of these measures make watering more efficient by reducing water loss to evaporation.
- **Do not overwater your lawn.** Water every 3 – 5 days in the summer, and every 10 – 14 days in the winter.
- **When landscaping, try to choose plants which are native to the area or will thrive in the natural climate conditions of the area.** These plants will be more suited to the natural amounts of rainfall. Check our website for plant species appropriate for streambanks, rain gardens, etc.
- **Retain and use rainwater at a later date for landscaping and gardens.** Rain barrels make this easy to do. Contact HRWA to purchase a rain-barrel — see the article on page 15.

For more information regarding water conservation in the home, check out the following websites:

<http://www.xeriscape.org>,  
<http://www.cce1.org>,  
<http://www.h2ouse.org>  
<http://www.riversmart.org>



# Be Part of the Solution: Create Your Own Rain Garden

by Gwen Blanton,  
Environmental Specialist

These days, with so many roads, parking lots and rooftops, a lot of rain water never soaks into the ground — instead it flows immediately to the nearest storm drain and then goes crashing into a stream or river. Increased runoff causes more flash flooding and each rain event washes car leaks like oil, grease and antifreeze, excess fertilizers and other pollution into our rivers and streams.

Here's a way that you can help reduce runoff and beautify your property at the same time — install a rain garden. A rain garden is a shallow pond area with soil, native plants and mulch that captures rainwater and lets it soak into the ground to help recharge vital groundwater and slow rainwater entering streams.

## Choose Your Rain Garden Spot

Start by noticing where your rainwater flows and then try to put your rain garden in this area. If you have an area that collects standing water after heavy rains, this might be a good spot. You can create a small terrace or redirect rainwater to your preferred garden site by creating a swale or putting in underground piping.

Keep these pointers in mind when deciding where to put your rain garden: Stay downhill and at least 10' away from building foundations and basements. Avoid septic system drain fields, underground utility lines and digging under large trees. Avoid black walnut trees as they put off chemicals that inhibit other plant species. Make sure any overflow from the rain garden will discharge to a suitable location.

## Size Your Rain Garden

Ideally, the area of your rain garden should be about 20-30% of the surface area (roof or pavement) that drains into the garden, but remember any rain garden is better than none and you have to start somewhere!

## Check Your Soil

Test the drainage in your garden site by digging a hole 8" deep and 8"

wide. Pour in a bucket of water. If the water doesn't go down at least 1" every hour, you will want to improve or replace your soil — or try a different spot. Even if your soil has good drainage, dig your garden a little deeper and then add some of the soil back, mixing with sand and compost.

## Design Your Rain Garden

There are three zones in a rain garden: very wet, wet-to-dry, and dry. Plants that like very wet feet will be in the center of the garden (the deeper, flat part). Plants that like wet-to-dry will be toward the edges on the slopes leading up to the yard level, and plants that like dry will be at the top of the slopes and on the outer edges of the rain garden. Your garden will be scalloped like a bowl with a flat bottom, sloping down from the sides to about 4-6" deep in the middle.

To start, dig out your rain garden area 6" to 2' deeper than your finished level — make sure the bottom is flat. The more compacted or "clayey" your soil is, the deeper your initial dig should be. Mix some of the removed soil with sand and compost and put it back into the rain garden as a planting medium, or discard it and use a rain garden soil mixture of 50-60% sand, 20-30% topsoil and 20-30% compost as the bottom of your rain garden. Before adding your soil back, make sure you

don't have perfectly smooth walls and bottom. You'll want to scratch and scratch the scallop to help with infiltration before adding your mixture.

When you're ready to plant, test how the rain garden will hold water by running a hose from the downspout. You may need to make adjustments like adding a berm on the lower side of the garden or revising the flow of water into the rain garden or the overflow away from it. This will also help settle the soil before planting. Let the soil dry some and you're ready to plant!

## Plant Native Tennessee Plants

Take into account how much sun your rain garden receives. You may want to plant some larger plants that will eventually give shade and plant the shade-loving things later. Also, your garden will actually be dry most of the time so choose plants that can tolerate both wet and dry.

## Learn More

For a list of rain garden plants, and more details about building a rain garden, contact the HRWA office or visit [www.harpethriver.org](http://www.harpethriver.org). You can also find more information at [www.raingardens.org](http://www.raingardens.org) or check out *Gardening with the Native Plants of Tennessee* by Margie Hunter for planting suggestions.

## We Can't Thank Them Enough...

- ◆ **Dr. Mark Ivy** — Assistant Professor of Recreation and Leisure Services at MTSU for steering in our direction such great interns: **Alyn Baggett** and **Eddy Bateman!**
- ◆ **Laura Jacobs and her class from Nashville Tech** who assisted with the Rapid Stream Assessment as well as the tree planting at Jerry Erwin Park.

## What About You? Join the Flow!

You don't have to be an expert to be a Harpeth River Watershed Association volunteer. All you need is a little time and a lot of love for the creeks and rivers that make Middle Tennessee special! HRWA needs volunteers to do office work, field studies (we will train you!), and to help with special events and restoration projects. Call 790-9767 if you can join the Volunteer River Restoration Corps (VRRRC), organize a fishing derby, help with a river festival, hand out HRWA brochures, be a demonstration site for landscaping options and farm practices that protect water quality, be a local coordinator of restoration efforts in your area, invite HRWA to speak at your group meeting. We need YOU!

# Hidden Treasures of the Harpeth

by Louis Levine

I grew up in Nashville and have many fond memories of my dad taking our family rock collecting along Hwy 70 and wading in the nearby Harpeth. I was always picking up interesting odds and ends, as I still do, and probably found my first freshwater mussels on one of these outings. Now, forty years later, I wish I had kept more of my early finds since some species have already become extinct in my lifetime. I have come to appreciate the often overlooked freshwater mussel for its diversity, subtlety, and beauty. Unfortunately, this group of animals is one of the most endangered in the world. More than two dozen species have died out in Tennessee over the last one hundred years and several more are listed as threatened or endangered. In fact, the Tennessee Wildlife Resources Agency protects all mussels and requires a permit to collect any shell live or dead. About ten species are commercially harvested for the cultured pearl industry.

Most of our freshwater mussels belong to the family *Unionidae*. There are a few other families represented in Tennessee which include the tiny fingernail or pea clams, the Asian Clam, the Zebra Mussel, and the Spectacle-case. Worldwide, there are around 300 Unionid species and our state has nearly 130 of the total. Only Alabama has more mussel diversity. The best populations that still survive are in the Duck and Clinch Rivers, where it is possible to encounter more than forty varieties in some locations. The Harpeth before 1960 supported approximately twenty-five species and still has over a dozen well-represented species.



**Pink Heelsplitter**  
*Potamilus alatus*



**Threeridge**  
*Amblema plicata*

The major factors affecting today's mussels are pollution and loss of habitat. The unique natural history of these animals makes them good environmental health indicators. They are filter-feeders which makes them particularly vulnerable to pollutants in the surrounding water, and variation in water temperature has an adverse effect on their ability to breed. They have a parasitic larval stage which must feed on the gills of specific host fish, and, in one case, host salamander. Without these complementary species, the mussels cannot survive. Few species tolerate silty water, with the majority preferring fast-moving, highly oxygenated water with a gravel substrate.

Common names for our shells are usually colorful and descriptive. Some of the species I have encountered around the Narrows of the Harpeth have been Threeridge, Pistol-grip, Fluted Shell, White Heelsplitter, Pink Heelsplitter, Spike, Deertoe, Purple Wartyback, Pocketbook, and Fragile Papershell. Most of the shells you'll find are worn and old dead specimens. Muskrats feed on the smaller shells, especially Asian clams which are not native to this country, and often leave them in small mounds on the shore. Recently introduced otters seem to also be dining on mussels. Live shells are usually partially imbedded in the gravel and can be easily overlooked.

The definitive reference book is *The Freshwater Mussels of Tennessee*, written by Paul Parmalee and Arthur Bogan, and published in 1998.

*Louis Levine offers wildlife programs for scouts, camps, schools and birthdays. Contact him at (615) 352-2134 or email louis.levine@earthlink.net.*

.....clip and save

## Eyes on the Harpeth



**What to do  
in case  
of a River  
Emergency**

**If you see a fish kill of any size, chemicals spilling into any drainage way, or mud coming off a construction site, report it immediately to the TN Department of Environmental Conservation:**

**Call 1-888-891-TDEC (8332)  
24 hours a day**

It takes quick action to gather the information to determine the source of the problem and to contain a pollution risk. TDEC and other state agencies have a system to respond, so don't hesitate to call any time of day and leave a message if it is after hours. A quick response is vital to effective law enforcement.

**For mud running off construction sites**, local governments have regulations on erosion control and stormwater runoff and will respond first. Call:

**City of Franklin, 791-3218  
City of Brentwood, 371-0080  
Williamson County, 790-5608  
Davidson County (for Bellevue):  
880-2420  
City of Dickson 441-9506**

If possible, take a dated photograph, jot down as much detail as possible, and provide it to both TDEC, the local government if appropriate, and to HRWA so we can follow-up!

**BE SAFE: Do NOT trespass and do NOT get near any situation involving a chemical spill.**

**Contact HRWA and send us your information also:  
(phone/fax) 790-9767,  
P.O. Box 1127, Franklin, TN  
37065, www.harpethriver.org.**

**Please cut this out and hang it in a visible place!**

# Take a Walk on the Science Side: Why Aquatic Buffer Zones are So Important

by John McFadden, Director of  
Science & Restoration Programs

Most landowners whose property runs along a river or stream naturally want to be able to enjoy their view of the water. This desire often results in the clearing of trees and mowing the lawn right up to the river's edge. Often, landowners don't realize that these efforts to get a better view can result in loss of property through erosion. So what's the answer to fully enjoying the river while also protecting the river and the land? Aquatic buffers, to use an ecological term.

## Defining the Riparian Zone

The streamside or "riparian zone," is defined as the area from the top of the river's bank out to 300 feet — in other words, the 300-foot wide strip running alongside the river. The riparian area is critical to the health of the river because it performs three critical ecological tasks: promoting biological diversity, wildlife connectivity, and hydrologic functioning. Attention to these three functions ultimately helps create a healthy aquatic buffer which will enhance long-term enjoyment of the river by the landowner.

## Biological Diversity: Land & Water

"Biological diversity" — the variety of plant and animal species — occurs in riparian areas because these streamside areas represent transition zones between two types of environments: land and water. Riparian zones support a wider variety of plants and animals than either the land or the water can.

The vegetation along the river, especially deep-rooted trees like the sycamore, helps hold the soil in along the bank, defending your property against erosion. Therefore, it's a good idea to leave the trees and natural vegetation as an aquatic buffer. Do not mow right up to the river's edge! The vegetation also provides cover and food for wildlife, which are necessary components if the wildlife is going to live in and move through these areas.



This eroding stream bank in Brentwood is one of many HRWA targeted for restoration in 2003.

Select some areas of the buffer zone to be landscaped with low growing vegetation and you can still have your "view" while also protecting the health of the river.

## Protecting Wildlife Corridors

"Wildlife connectivity" — the ability of animals to move from one habitat area to another — is also crucial to the health of the river system. One of the toughest environmental impacts caused by our society's sprawl is that wildlife populations become isolated or lose the connecting corridors that they used to rely on to move from one area to another in search of food, shelter and mates. Animals use river and stream corridors as transportation routes. They need areas that provide cover (such as shrubs) for a place to bed down at night, and they feed on the rich biodiversity associated with streambank areas. Biodiversity and connectivity are promoted by the unique water flow of the riparian zone.

## Where Does Flowing Water Go?

"Hydrologic functions" — how the water flows in and through the streamside zone — may be the most impor-

tant aspect for us to consider when thinking about aquatic buffers. The ability of a river or stream to respond to rainfall and drought without flash flooding or going dry is tied to having an aquatic buffer. These streamside buffers store water, "recharging" the stream during dry periods and absorbing and storing water (as groundwater) from both rain and from the river itself during wet periods.

Parking lots and lawns up to the river's edge in effect send precious rain downstream versus letting it soak into the ground. Two things happen as a result: streams fill more often and faster which causes banks to erode, and groundwater does not get recharged so streams dry up in the summer and river flows become unnaturally low.

The other very important hydrologic function of the riparian zone is its ability to filter out pollutants from water, usually from rainfall, that enter the area from the surrounding landscape. To do this, stormwater needs to be allowed to dissipate and flow through the riparian zone in a dispersed manner (called "sheetflow") rather than being funneled through ditches and culverts directly into the stream or river. Concentrating rainwater into culverts is the primary way pollution gets into our rivers and also the main cause of streambank erosion.

## HRWA's River Restoration Program

In 2002, HRWA conducted a visual stream survey that identified over 100 sites around our watershed that need restoration. See the cover story for details on the projects our staff and volunteers have undertaken this year.

Preserving an aquatic buffer on your property will protect your RIVER and your VIEW. Contact us for more information on plant species appropriate for the streamside zone, for landscaping techniques such as "rain gardens," development site design approaches, and farm management techniques that can be used to effectively protect river health and enhance property values.

# SPECIAL THANKS

*We couldn't do it without your help!*

The Harpeth River Watershed Association would like to thank the following for their time, attention and/or financial support from November 2003 through August 1, 2004.

**\* Volunteer River Restoration Corps members are marked with an asterisk.**

## **Stewardship Council, 2004 (Gifts of \$250 or more)**

Bill & Lin Andrews  
N.A.C. & Jane Severs Andrews  
Anonymous  
Atticus Trust  
Beth & Joe Bankemper  
Elaine & Steve Blount  
Pam & Bob Bolen  
Claude Carmichael  
& Dorie Bolze \*  
Ray & Marlene Bolze  
Governor Phil Bredesen  
& Andrea Conte  
Mary & Hank Brockman \*  
Martin S. Brown  
Elena & Barney Byrd  
Stewart & Mary Campbell  
Dan & Lori Canale \*  
Gary & Jennifer Chapman  
Martin & Laurie Clayton

Bill & Jane Coble  
Susie (Donna) Coggins  
Congregation Micah's  
5th Grade Class  
El & Debra Cox  
Deborah Craig  
Charles & Kimberly Crews  
Robert & Judith Crosby  
Bill De Priest  
Mr. & Mrs. John H. Dillon  
John & Janith Dixon  
Joel & Holly Dobberpuhl  
Matt & Ann Dobson  
Tim Giatano & Corbette Doyle  
Kyle & Emily Duvall \*  
Charles A. Elcan  
Craig & Lorraine Ferrell  
Joe Glaser  
Linda & Steve Harlan \*  
John & Nancy Hiatt  
Henry & Alice Hooker  
John & Stephanie Ingram  
Orrin H. Ingram

Peter & Rudy Jordan  
Robin & Bill King  
Dan Klatt  
Patty & Robert Kriebel  
Jeff & Lindy Lawrence  
Ann & Ned Lea  
Robanne & Dr. Harry Legan  
David & Elizabeth Lemke  
Luke Lewis  
Pam Lewis  
Mac & Kelly Linton  
Robert & Susan Lipman  
Tom Loventhal  
Emily Magid  
Boyce Magli  
Katherine Greenbaum  
& Joshua May  
Drs. Darrell & Kay McClain  
John McFadden \*  
Miriam McFadden  
Andrew W. Miller, Jr.  
Jim & Penny Moore  
William & Lisa Morgan

Melinda Welton & John Noel  
Mollye Brown & Paul Polycarpou  
Elizabeth Queener  
George R. Rawlings  
Nancy & Jonathan Schwartz  
Ed & Sue Silva  
Paul & Margaret Sloan  
Reese & Emily Smith III  
Steve Smith  
Southern Land Company  
Alex & Sondra Steele  
Stites & Harbison  
David & Sallie Talley \*  
Trillium Ventures  
Alex & Mary Wade  
Waller Lansden Dortch & Davis  
Mike Walton  
Ridley & Irene Wills II  
Dave & Marty Wilson \*  
Bet & Doug Wise  
Paul Worley

## **Organizations**

Andrews Appraisal ● Aquaeter ● Atticus Trust  
Brentwood Parks Department ● Horatio and Willie Buntin Foundation  
Center for Watershed Protection ● Chestnut Group  
City of Brentwood ● City of Franklin ● City of Kingston Springs  
Community Foundation of Middle TN  
Deborah Craig Family Foundation ● Cumberland River Compact  
Dalmatian Press ● Environmental Management and Engineering, Inc.  
GroWild, Inc. ● The Heritage Foundation of Franklin & Williamson Co.  
Institute for Conservation Leadership ● ISDN-NET  
Jen-Hill Construction ● King Family Advised Fund  
of the Community Foundation of Middle TN  
The Land Trust for Tennessee ● Pam Lewis Foundation  
Lipman Bros., Inc. ● Metro Nashville/Davidson Parks Department  
MTSU Geography Department and Mark Abolins  
Natural Resources Conservation Service ● One Source, Inc.  
Print Shoppe of Franklin ● Rawlings Foundation  
Red River Watershed Association ● River Network  
Southern Environmental Law Center ● Southern Land Company  
Stites and Harbison ● TDA Nonpoint Source Program  
TDEC Water Pollution Control ● Tennessee Clean Water Network  
Tennessee Wildlife Resources Agency ● TMA Group  
U.S. Geological Survey ● U.S. Fish and Wildlife Service  
Walton's Antique and Estate Jewelry  
Williamson County Government

## **Individuals**

Ray & Shannon Alley \*  
Christopher Anderson \*  
Rogers Anderson  
Tina & Timothy Anderson  
Ernie & Nell Bacon  
April Barker  
Chris Barberic \*  
Leann & Jay Barron  
Brittany Barton \*  
Sam & Tracey Bastian  
Deryl & Phyllis Bauman  
Kathryn Brothers & Mark Beall  
Brian, Sarah & Cameron Berger \*  
Betty Bibb  
Butch & Anita Bice  
Don Bivens  
Sandra Bivens \*  
Gwendolyn Blanton  
Cheryl & John Bolze  
Barbara Bransford  
Eric, Sue & Aaron Broder \*  
Jill Brown \*  
Robert D. Brown  
Maria Browning  
Roxanne Brunetti

Heath Bush \*  
Michael & Max Cain \*  
Duncan Callicott  
John Callighan \*  
Mike Campbell \*  
Frank & Mary Caprio  
Jeff Carr  
George H. Cate, Jr.  
Tavia Cathcart  
Chad Chapman \*  
Lindsay, Susan & Lily Chappell \*  
Robert Christie  
Marvin & Patricia Clements  
Logan Cohen \*  
Anne Collie  
Jeffrey Conklin \*  
Dixie W. Coutts  
Heather & Art Creel  
Kelly & Chad Dannenfelser  
Pam Davee  
Charlie & Joyce Deason  
J. Cliff Denson  
Betty & W.B. Dickerson  
Tim Diehl \*  
Fred, Robin & Lauren Dillon \*

*continued*

**Individual Donors,  
continued from page 13**

D.J. (Jeff) Dobson \*  
 Kyle & Emily Duvall \*  
 Joyce & H.A. Duvier  
 Bonnie & Richard Edwards  
 Justice, Roberto & Max Estrada \*  
 Talia Flantzman \*  
 Individual Donors,  
 continued from page 13  
 Steve Foster \*  
 Toni Lin Friedman \*  
 Matt Gamary \*  
 Daniel Garcia \*  
 Judy & Gil Given  
 Mazzie Darlene Gibson  
 Susan & Walter Gorman  
 Don, Amy & Ailie Green \*  
 Dan & Julia Halford \*  
 Yvonne & Scott Hall  
 Phil Pace & Elizabeth Hand  
 Joan Harshman  
 Robert E. Harwell, Jr.  
 Connor & Ellen Haugh \*  
 Melissa & William Hayes  
 Brett Heeney \*  
 Brian Heffron \*  
 Reva & Gene Heller  
 Senator Douglas Henry  
 Stephen, Colleen & Sam Heyman \*  
 Robert Hicks  
 Betty Hoet \*  
 Eli, Dana & Barbara Holmes \*  
 Jan Huffman  
 Lloyd & Matt Jaeger \*  
 Nancy James  
 Donna Jones-Bailey  
 Paul Kaminski  
 Wendy Kanter \*  
 Sherri Kilgore  
 Colleen Kirby  
 Woodie & Kathy Knight  
 Jennifer Krahenbill  
 Rob, Lori & Morgan Landsberg \*  
 Daniel Landsman \*  
 Ken Lass  
 Joe Lassus \*  
 Gabriel Laurence \*  
 Susan & Anthony Leath  
 Andree & Alan Lequire  
 Ellissa B. Lamb  
 James Lang  
 Michael, Sherrie  
 & Zachary Levine \*  
 Robin, Iris & Max Levine-Fields \*  
 Peggy West & Susan Lewis  
 Adam & Jonathan Liff \*  
 Matthew & Stacey Ligon  
 Belle Lipksy  
 Rick & Robin Lockwood \*

**\* Volunteer River Restoration  
Corps members**

Rick Loomis  
 Stephen Lutzak, M.D.  
 Chris Martin  
 Joanne & Jacob Martin  
 Leslie Maxwell \*  
 Kathy McCaughna  
 Bill, Deborah & Leah McCormick \*  
 James McDonald \*  
 Mark McEntire \*  
 Stacey W. McRight  
 Larry, Rebecca & David Merin \*  
 Andrew Miller  
 Misty Miller \*  
 Mark & Bonnie Miller-McLemore  
 Tim Mobley \*  
 Philip Molteni  
 Gary Moody \*  
 Ernest & Angie Moore  
 Jason Moore \*  
 Leslie Morales  
 Cynthia & Dick Morin  
 Lisa, Jason & Jeremy Morrow \*  
 Kevin Mulder \*  
 Ray & Jane Norris  
 Helen & Richard Olsen \*  
 Ayla Oneal \*  
 Bill Ormes  
 Barbara & James Orr  
 Nathan Packer \*  
 Jason Painter \*  
 Soraya Cates Parr  
 William V. Parsons  
 Mary Evins & Harris Pearce  
 Bob & Fern Perry  
 James & Susan Pirtle  
 John Pogue \*  
 Jim & Kim Poole  
 Aubrey Preston  
 Clara & John Priest  
 Suzan & Jerry Putman  
 Michael H. Read  
 Sydney J. Reichman  
 Leslie Ress  
 Mr. & Mrs. J. Allen Reynolds III  
 Rich Richardson \*  
 Arnold, Beth & Amzi-Lynn Rickert \*  
 Bob & Charlene Ring  
 Beth Roberson \*  
 Nicholas Romer  
 Anne Rutherford  
 Dan Ryan \*  
 Jo Sharp Ryden  
 John & Linda Ryman  
 Anne Ryon  
 Robert Shaughnessy  
 Holly & Lanny Sherwin  
 Martha Sheehan  
 Patty Shultz \*

**Not Just a Drop in the Bucket...**

The Duck River Opportunities Project (DROP), a cooperative effort of the Tennessee Scenic Rivers Association and Saturn Corporation, schools and landowners, was launched in 1999 to improve long-term water quality in the globally ecologically significant Duck River watershed and expand community awareness of water quality issues. Two HRWA staff, John McFadden and Gwen Blanton, are the Director of Science and Restoration and the Environmental Specialist, respectively, for the DROP. DROP staff and volunteers have formed a partnership with the GM-GREEN program to work with teachers and students both in the classroom and in the stream. Together they investigate water chemistry, aquatic insects and streamside habitat. These students then look for ways to improve their local stream with civic action and personal attention.



Working with the Duck River Opportunities Project, students from E. A. Cox Middle School in Columbia capture aquatic insects to help determine the health of Bear Creek in the Duck River watershed.

Ed Silva  
 Lisa Silver  
 Pam & Doug Sisemore  
 Debbie & Michael Smith  
 Ed & Paula Snyder \*  
 Bill & Susan Snyder \*  
 Hayden Sohr \*  
 Gary Soltesz  
 Chris & Dawn Spiegl \*  
 Helen Stewart \*  
 Jennifer, Jesse & Selah  
 Stewart-Wright \*  
 Richard Sumner \*  
 Kenny Surprise \*  
 Elizabeth Tomlinson  
 Betty & Bob Townsend  
 Charles C. Trabue, III  
 Charles Tygard, Jr. \*  
 Jack & Helen Tyson  
 Nicole Valentine \*

Jane Vandeventer  
 Phillip, Wendy & Brian  
 VerMeulen \*  
 Claudia & Brian Wadzinski  
 Ted & Joan Walker  
 Brenda Watkins  
 Greg & Paula Weaver  
 Nina Weiss \*  
 Lisa Scott & Sherry Welch \*  
 Carol Warren & Dale Whitehead \*  
 Karen Wieckert \*  
 Neil J. & Joyce Wilding  
 Joy Williams  
 Eleanor L. Willis  
 Sidney & Dick Wooten  
 Benjamin, Laura & Harrison  
 Zeitlin \*  
 Charles & Sharon Zieman

## Rain Barrels to the Rescue!

Here's an easy way to protect the Harpeth — use the water from your roof to water your yard. The average household uses HALF its water on the yard, so collecting water in a rain barrel can help reduce your need to take precious water from the Harpeth or Cumberland in the summer when the water is low. Also, a rain barrel, combined with simple landscaping to absorb your roof runoff, can protect nearby streams by reducing the stormwater runoff from your property.

RiverSides, located in Toronto, Canada, specializes in rain barrels and other techniques homeowners can use on their property to reduce runoff. Thanks to HRWA's partnership with RiverSides, you can order a rain barrel through HRWA and, since we're ordering in bulk, you'll save drastically on shipping.



Call HRWA at 790-9767 to order your rain barrels today.

- Black (recycled) or Green : \$130 plus shipping and handling.
- Sandstone or Granite: \$160 plus shipping and handling.
- Capacity: 132 gallons will hold several rain events
- Dimensions: 51 inches tall, 30 inches wide, 8-sided.

For details, contact RiverSides at 416-392-1983 or [www.riversides.org](http://www.riversides.org).

## OUR NEW OFFICE FEELS LIKE HOME! 604 West Main Street, Franklin

We have many folks to thank for the easy transition to our new office space at 604 West Main: First, **Stites and Harbison** for renting us the space while covering the costs of our utilities, phone service, and a security system, providing the use of the copier and fax machine, allowing us the use of much-needed conference room space, and even giving us the first month's rent free and helping us set up our computers. THANK YOU!!! Other thank-you's go out to **Robert Pickens** for donating six tall filing cabinets; **Bob Crosby** for donating a complete set of office desks and matching tables, a filing cabinet, chairs and even a couch and end table; **Holly Sherwin** for donating a two-drawer filing cabinet; **Bruce Campbell** for donating a paper cutter and two sets of book shelves; and **Claude Carmichael** and **Kyle Duvall** for donating the manpower to move everything into the new office!!!

## Financial Statements ~ 2003

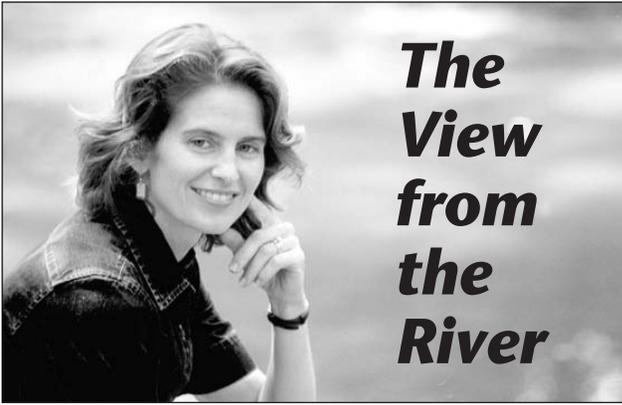
### I. Income and Expense Statement (year ending Dec. 31, 2003)

<b>INCOME</b>	
Government Grants	\$22,739
Grants — others	700
Foundations	7350
Donations:	
Stewardship Council	56,875
Membership	10,076
Special Event	13,090
Other—Bronze Turtle Sculptures, etc.	5365
Earned Income	7595
<b>Total Income</b>	<b>\$123,790</b>
<b>EXPENSES</b>	
Staff	\$82,663
Professional Fees	2797
Conference Fees	780
Insurance	898
Lab Costs	1070
Licenses, Fees, Subscriptions	647
Meeting expenses	570
Postage	2130
Rent	1203
Printing/Copying	2333
Supplies/Equipment—Office	1518
Supplies-Restoration Projects	1677
T-shirts and related materials	1039
Telephone	1830
Travel and mileage	3014
Other — bronze turtle sculptures	3750
<b>Total Expenses</b>	<b>\$107,919</b>
<b>Excess of Income over Expenses</b>	<b>\$15,871</b>

### II. BALANCE SHEET

<i>Assets</i>	
Cash	\$29,692
Accounts Receivable	1000
Furniture and Equipment	10,270
<b>TOTAL ASSETS</b>	<b>\$40,962</b>
<i>Liabilities and Equity</i>	
Liability	\$12,062
Equity	\$28,900
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>\$40,962</b>

A portion of the cost to produce this piece was funded under an agreement with the TN Department of Agriculture's Nonpoint Source Program and the US Environmental Protection Agency Assistance Agreement #C9994674-03-0



Will Jordan

by Dorene Bolze, HRWA Executive Director

Do you know that you are living in a global biological “hot spot”? The southeastern freshwater river systems of the Cumberland, Tennessee, and Mobile are unique to the world. According to a 2002 study by The Nature Conservancy, the Tennessee and Cumberland river systems contain the highest number of different species of fish, mussels, and crayfish and the highest number of endemic (found nowhere else) freshwater wildlife in North America.

Do you know that the lower Harpeth River from Highway 100 near Warner Parks to the Cumberland was identified by this study as one of 69 priority areas for freshwater conservation in the Tennessee and Cumberland River systems? Kelley Creek near Leiper’s Fork, many headwater tributaries along the remaining unbuilt section of Highway 840, and the South Harpeth are other areas of the Harpeth with top water quality and biological integrity.

Compare this “view” of the Harpeth with the fact that it flows through one of the fastest-growing regions in the country. Analysis of this growth shows that by 2020 the upper Harpeth in Williamson County and Bellevue will become seriously degraded, the damage being mostly irreversible. Also, for the upper Harpeth to meet water quality standards, preliminary work by the EPA indicates that we will need to reduce the amount of pollution from storm runoff — from lawns, cities, farms — and from sewage treatment plants by 20% to over 50% depending on where you are in the upper Harpeth. This presents a major challenge for all of us.

With the future of the Harpeth tied to growth, HRWA is working with local governments on how stormwater regulations, zoning and other approaches can or already do include ways to reduce runoff and erosion. We will be working with many partners on this with a new EPA grant to protect water quality in the Harpeth and provide the lessons and approaches we learn here to communities throughout Middle Tennessee and the state. We have also joined with the Duck River Opportunities Project of the Tennessee Scenic Rivers Association to share scientific and technically trained staff as we work with local communities.

The future “view” of the Harpeth as a healthy river is in our collective hands! Your support is so important — and greatly valued.

## Look Inside & Take Action: We Can All Help the Health of the Harpeth

- ◆ **Get muddy, plant trees, have fun**—Join the Volunteer River Restoration Corps! (pg. 1)
- ◆ **Take a tour or head on out to the Hootenanny**—Clip & save our fall events calendar. (pg. 3)
- ◆ **Sign on**—Join HRWA today or renew your membership. Your support is critical. (pg. 4)
- ◆ **Congratulate the winners of the 2004 River Steward Awards**—They are leading the way! (pg. 5)
- ◆ **Invest in the Harpeth River’s future**—Become a Stewardship Council member (pg. 8) or consider planned giving through our new stock fund (pg. 6).
- ◆ **Save water, install a rain garden, preserve an aquatic buffer zone, or set up a rain barrel**—See what you can do to help the Harpeth right in your own house or backyard. (pgs. 9, 10, 12, 14, 15)
- ◆ **Be a River Watcher**—Learn what to do in case of a River Emergency. (pg. 12)



**HARPETH RIVER WATERSHED ASSOCIATION**  
**P.O. Box 1127**  
**FRANKLIN, TN 37065**  
**WWW.HARPETHRIVER.ORG**

*Come to the Harpeth River  
Hootenanny ~ September 17*

*See page 1 for details.*

**PRSRST STD**  
**U.S. POSTAGE**  
**PAID**  
**NASHVILLE, TN**  
**PERMIT 777**