

The mission of the Mississippi Department of Environmental Quality is to safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.

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Mississippi Department of Environmental Quality Environmental News

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DAM SAFETY DIVISION--PROTECTING PEOPLE AND PROPERTY

A series of catastrophic dam failures across the country in the 1970s, which caused the loss of hundreds of lives and over a billion dollars of property damage, led to the issuing of a Presidential Executive Order in 1977 requiring the U.S. Army Corps of Engineers to inspect the nation's non-federal high hazard dams. The Corps of Engineers coordinated with the states to inventory all dams in each state and to inspect the ones that the states believed threatened downstream lives and property. The inspection reports were then given to the states for them to take action.

In 1978, the Mississippi Legislature authorized the Mississippi Board of Water Commissioners (which would later become the Office of Land and Water Resources of the Mississippi Department of Environmental Quality) to launch a dam safety program to ensure that dams are built and maintained properly to protect downstream lives and property.



"State law has given our agency the responsibility to implement and enforce dam safety laws and regulations, but it is so much more than that. It's about protecting people, their homes and their livelihoods, along with vital infrastructure like roads and bridges. It's about being prepared and preventing problems before they happen and also responding quickly and efficiently if there is a dam failure," said Trudy Fisher, MDEQ Executive Director.

The Dam Safety Division's primary duties are to:

- Enforce the state's Dam Safety Statutes and Regulations.
- Review the design plans and specifications for all dams constructed in the state greater than eight feet in height or store more than twenty-five acre-feet.
- Inspect dams and review dam inspection reports.
- Provide information and educational outreach to dam owners and the general public.
- Oversee the development of emergency action plans for high hazard dams and ensure the plans are reviewed and updated.
- Maintain a database and files on all dams in the state.
- Respond to dam incidents and failures.



MDEQ staff with Gov. Phil Bryant at the Percy Quin State Park dam incident in Pike County in 2012. Dams which are on the state's inventory are classified into three categories:

- •High Hazard A dam whose failure may cause loss of life, serious damage to homes, industrial or commercial buildings, important public utilities, main highways, or railroads.
- Significant Hazard A dam whose failure may cause significant damage to main roads, minor railroads, or cause interruption of use or service of relatively important public utilities.
- Low Hazard A dam whose failure may cause damage to farm buildings (excluding residences), agricultural land, or county or minor roads.

There are currently 269 high hazard dams, 60 significant hazard dams, and 3,516 low hazard dams on the state's inventory. The Dam Safety Division is in the process of doing a hazard class reassessment of the state's low hazard dams, which may result in a large number of low hazard dams being reclassified as either High or Significant Hazard due to downstream development and other issues.





Dam Safety staff supervises the breaching of dams when necessary to protect those downstream.

In addition, Dam Safety staff is working to identify dams that have been constructed in the past 30 plus years without authorization. Preliminary results show that there may be an additional 3,100 dams that will meet the criteria to be added to the state's inventory.

Each year in Mississippi there are several dam failures with the most notable being Big Bay Dam in Lamar County which failed in 2004 damaging or destroying more than 100 homes but thankfully not causing any loss of life. Another serious incident the state has faced in the past few years was the Percy Quin State Park dam incident in Pike County in 2012 where a failure of the dam could have potentially threatened not only Mississippi residents but also people downstream in Louisiana. The MDEQ Dam Safety Division, along with several state agencies, responded to the incident and was able to prevent the failure of the dam.

It is the Dam Safety Division's role to ensure citizens' lives and property are protected from dam failures through a proactive system of inspections and assessments that identify and address deficiencies in dam design and construction prior to failure. Staff also works to prevent the loss of lives and property by responding to incidents at dams to prevent failures so the effects are as minimal as possible.

For additional information, please contact:

Dusty Myers, Chief, Dam Safety Division (601) 961-5207; DMyers@deq.ms.gov

Kay Whittington, Director, Office of Land and Water Resources (601) 961-5729; KWhittington@deq.ms.gov



Mississippi Manufacturers Association

The Voice of Industry since 1951 www.mma-web.org



Tools & Techniques for enHanced Operations: Energy Efficiency and Waste Reduction Opportunities



on't miss the chance to learn how you can reduce energy usage, reduce material and labor wastes in operations, reduce waste going to the landfill, and improve your bottom line. This timely workshop will provide networking opportunities to learn what others in the state are doing to improve operations and increase profits.

Agenda

- ♦ 8:00 to 8:30 a.m. REGISTRATION
- ◆ 8:30 to 8:45 a.m. WELCOME & OVERVIEW; Dallas Baker, MDEQ enHance Program
- 8:45 to 9:15 a.m. PROCESS IMPROVEMENT FOR SAVINGS Waste & Energy Reduction; An industrial case study focusing on Business Process Improvement utilizing E3 (Energy, Economy, Environment); Glenn Dennis, Mississippi State CAVS Extension
- 9:15 to 10:00 a.m. TOOLS FOR ENERGY SAVINGS Thermal Imaging, Data Loggers
 & More; Learn about tools that can be used to identify and implement energy savings opportunities with hands-on demonstrations; Bryan Buhler, Fluke
- 10:00 to 10:15 a.m. BREAK
- ◆ 10:15 to 10:45 a.m. OPTIMIZING YOUR ENERGY MANAGEMENT SYSTEM Recommissioning; Learn how, when and why to review operating parameters of HVAC equipment for optimized use and reduction of energy, with minimal expenditures; Wally Majors, Utility Analysts, Inc. & Chad Moore, Engineering Resource Group
- ◆ 10:45 to 11:30 a.m. OPTIMIZING YOUR ENVIRONMENTAL MANAGEMENT SYSTEM; Two companies showcase in-house environmental management tools used to achieve improved compliance performance and reduce associated liability; Clay Burton & Rickey McAlister, Nucor, and Rosario Martinez & Sean McCarthy, Toyota
- 11:30 a.m. to 12:15 p.m. IMPROVING RECYCLING MARKETS IN MISSISSIPPI; An overview of the challenges of recycling in a rural market; learn what others are doing to increase options & understand the economic impacts of recycling; Will Sagar, Southeast Recycling Development Council & Mark Williams, MDEQ
- 12:15 to 12:30 p.m. QUESTIONS/WORKSHOP WRAP-UP
- 12:30 to 1:30 p.m. AWARDS LUNCHEON; Awards presentation honoring 2014 enHance members; Trudy Fisher, Executive Director, MDEQ & Robbie Wilbur, MDEQ



When & Where Wednesday, April 9, 2014, Jackson Marriott, 200 E Amite Street, Jackson; 601-969-5100.

Please use the Marriott's parking by keeping left when going through the garage; vouchers will be handed out by MMA.

Cost \$85 per person.

Suggested Hotels in Jackson (Room rates based on availability.)

- * Jackson Marriott; 200 E Amite St., Jackson; 601-969-5100; \$129 per night; Reference codes: MSMMSMA (online), or Mississippi Manufacturers Association (phone). Deadline to receive this special rate is April 1.
- Cabot Lodge Millsaps; 2375 N State Street; 601-948-8650. Corporate rate: \$99 per night; code: MMA.

REGISTER ONLINE NOW

Reminder notices will be sent a few days prior to the seminar. If you do not receive a reminder notice, or if you would like more information about this or other MMA seminars, contact Barbara at 601-292-1125 or barbara@mma-web.org.

About enHance: The MDEQ enHance program is a voluntary initiative to recognize environmental leaders in Mississippi. Environmental leaders strive to reduce wastes and inefficiencies from operations, resulting in environmental and economic benefits. Visit the MDEQ enHance website for information on membership requirements and application forms. Applications for Membership are accepted annually from July 1- Sept. 30.



MMA Seminar Registration Form

Mississippi Manufacturers Association

Seminar Name			
Seminar Date	Seminar location		19 18 18
	nd job title(s)		
Company Address		<u> </u>	27 29 202
City		State	Zip
Attendee Phone Numbe	er		
Attendee Fax Number _			10 20 760
Attendee E-mail Addres	ss		-
If different than above:			
Name of Person Submit	tting Registration		
Job Title			
	Fax Number		
If different than above:			
Billing Contact			
Address			
Phone Number	Fax Number	E-mail	<u> </u>
Job Title			
Return form and pay	ment to: Mississippi Manufacturers As 948-6197. You may also register onlir	sociation, P.O. Box 226	07, Jackson, MS
Ar	merican Express Visa	MasterCard _	
Card number	Expiration of	date/ Se	ecurity code

- No refunds without 48 hours cancellation notice! No refunds for no-show.
- REMINDER NOTICES WILL BE SENT A FEW DAYS PRIOR TO SEMINAR DATE. If you do not receive a reminder notice, please contact Barbara at 601-292-1125 or barbara@mma-web.org.

NORTH DELTA FARM CLEAN UP AND PESTICIDE DISPOSAL EVENT A SUCCESS

On February 25, the Mississippi State University Extension Service held its second farm clean up and pesticide collection event in the North Delta. Another event was held earlier in Sharkey County in December 2013. Funding for these two events was provided by MDEQ.

Organizers invited farmers to drop off leftover pesticide products and waste tires at a collection site in Coahoma County. The event collected 30 loads of waste material from five counties totaling an estimated 46,000 pounds of product and 101 waste tires.

Mary Love Tagert, an assistant Extension professor in agricultural and biological engineering at Mississippi State University, said proper disposal of farm chemicals helps farmers while also protecting the state's natural resources.

"Producers and landowners have few options when disposing of waste pesticides, especially for outdated products that are no longer registered for use," Tagert said. "This program provides farmers a safe, easy and legal way to dispose of any and all pesticide products they no longer need or are not able to use."



Coahoma County Extension Director Don Respess said proper disposal of farm chemicals and waste is difficult for farmers and this service aids producers as well as the environment.

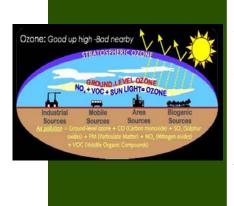
Information and photos courtesy of Mississippi State University and the Delta Council.

"This program gives farmers a legal way to dispose of any pesticide products or farm waste they no longer need. Farmers have very few options when trying to dispose of these products, and I hope to see such efforts continue," said Respess.

The program is provided at no cost to farmers by the MSU Extension Service and the Mississippi Department of Agriculture and Commerce. Funding comes from the Mississippi Department of Environmental Quality to make the program possible.







MISSISSIPPI AIR QUALITY ACTION GROUPS AND OZONE FORECASTING

Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) establishes primary air quality standards to protect public health and secondary standards to protect public welfare that includes protecting ecosystems, plants and animals. Currently, Mississippi is meeting all of these standards. The EPA has designated most of DeSoto County as part of the Memphis Nonattainment Area, even though it is meeting the standard. Although the EPA designated Harrison and Jackson Counties as in attainment, they are close to the standard.

Developing a plan to continue to meet the air quality standards is the focus of each of the Mississippi Air Quality Action Groups. Any area designated as nonattainment faces potential economic development constraints including limits to industrial growth and transportation improvement constraints such as restrictions on highway expansion and development.

The Mississippi Air Quality Action Groups, initially formed by the MDEQ, cities, county agencies, industries, government agencies, and public interest groups, are stakeholder-led efforts to raise awareness of the issue and how people can be part of the solution. The groups are open to anyone who wants to attend. The groups develop outreach materials and plan promotional events to encourage air pollution reduction steps such as carpooling, vehicle idle reduction, and postponing vehicle refueling and lawn maintenance until after 6:00 p.m. These groups are also trying to develop more efficient ways to notify residents and businesses on Air Quality Action Days. Air Quality Action Days are those days when ozone levels are forecast to exceed the standard. For those interested in being part of the Mississippi Gulf Coast Air Quality Action Group or the DeSoto County Air Quality Action Group, please contact Jerry Beasley with the MDEQ at (601) 961-5134.

Ozone air quality forecasts are available on the MDEQ website daily from April through October at http://opc.deq.state.ms.us/aqi/, through Twitter at @MDEQ, and an email list managed by Rodney Cuevas (receives-edge-state.ms.us).

MDEO SELECTS PROJECTS THAT REDUCE DIESEL EMISSIONS

As part of the Mississippi Diesel Emission Reduction Program, MDEQ recently awarded three grants for 2014 totaling approximately \$96,000 to implement cost-effective and innovative projects to reduce diesel emissions. The Itawamba County School District received funds to purchase two school buses, Sacred Heart Catholic School in Hattiesburg will purchase one school bus, and H&P Leasing in Flowood will purchase one Transport Refrigeration Unit.

The implementation of these three projects will help reduce diesel emissions, nitrogen oxides, and particulate matter. These pollutants affect the state's ability to comply with National Ambient Air Quality Standards, especially with ozone, and also help improve conditions for the public's health.

These projects were selected after MDEQ issued a request for proposals in late 2013 for diesel emissions reduction projects that could be implemented including engine repowers, engine upgrades, engine replacement, retrofitting of equipment, cleaner fuels, or idle reduction technologies. The initial funding was allotted from the U.S. Environmental Protection Agency to MDEQ for a sub-grant.

Truck with a TRU. The TRU powers the refrigeration on a trailer without the truck's engine running.



New school buses contain the latest technology that reduces emissions and are better for nearby students if idling.





HURRICANE BOWL

The University of Southern Mississippi (USM) every year hosts one of the largest Ocean Science competitions in the country called "The Hurricane Bowl." The competition takes place at the Gulf Coast Research Laboratory (GCRL), located in Ocean Springs, where high school students attend this academic competition with the main focus on ocean and freshwater sciences. This competition is used to inspire new and upcoming biologists from Alabama, Arkansas, the Florida Panhandle, Louisiana, Mississippi, and Tennessee and to increase their knowledge and understanding of the oceans.

This year, MDEQ had an opportunity to volunteer along with personnel from Stennis Space Center, NOAA, and GCRL. The volunteers functioned as moderators, science judges, rules judges, time keepers, score keepers, and runners for both varsity and junior varsity teams. USM and the volunteers not only kept the competition structured, organized and fair, but had the opportunity to talk to the students about their careers and their agencies. It was a very successful and fulfilling day for all!



MDEQ's Barb Viskup (right) serving as a time keeper.

Top: students competing.

Middle: MDEQ's Debi Dunlap keeping score.

Bottom: MDEQ staff Debi Dunlap, Barb Viskup, and Chris Griffith.







MDEO TO HOST RUBBISH SITE OPERATOR TRAINING

MDEQ is hosting the Mississippi training course for Class I rubbish site operators on June 11 and 12, at the Cabot Lodge — Millsaps on North State Street in Jackson. The course offers an opportunity to fulfill state training and testing requirements for the Class I Rubbish Site Operator Certification and updates general knowledge of Class I Rubbish Site regulatory and operational requirements. MDEQ also allows currently certified operators to attend as a refresher course for Continuing Education Units (CEUs).

The course is a day and a half class with a written examination on the second day. Persons who attend the course, pass the written examination, and meet the experience and education requirements may apply to MDEQ for a certificate of competency as a Class I rubbish site operator. The examination will not be required for those operators attending for CEUs only. All attendees that complete the class will receive 10 hours of CEUs that can be applied towards renewal of their certification. There is no registration cost for the training; however, all lodging, meal and transportation costs are the responsibility of the attendees.

Course instructors will include the staff of MDEQ and FTN Associates, Ltd. Advance registration for the course is required. For additional information on the training course and details about registration, contact Mark Williams with MDEQ at 601-961-5304 or visit the MDEQ solid waste program web page at:

www.deg.state.ms.us/solidwaste.





MDEQ PARTNERS WITH LOCAL GOVERNMENTS TO SPONSOR HOUSE-HOLD HAZARDOUS WASTE COLLECTION EVENTS

MDEQ is providing grants and technical assistance to a number of local governments throughout the state to sponsor upcoming collection events for household hazardous wastes (HHW). Solid Waste Assistance Grants awarded by MDEQ to these communities provide funding for the local HHW collection events. The collection events offer local options to properly and safely dispose of materials such as aerosols, corrosives, pesticides, herbicides, paints, used oil, batteries, automotive fluids, and electronic wastes. The events remove these hazardous materials from the municipal solid waste stream so that the wastes are not disposed in local landfills. Local governments that are planning to conduct HHW events that MDEQ is aware of include the following:

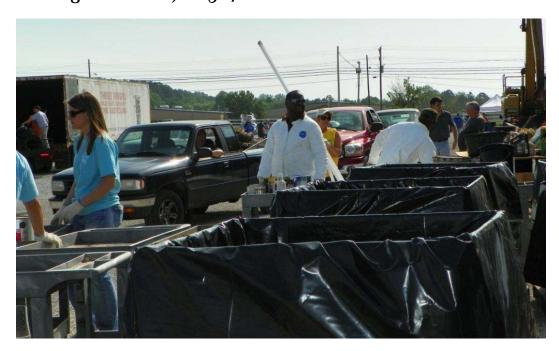
Sponsor Planned Event Date

Harrison County	April 5
City of Cleveland	April 12
Three Rivers SWMA/ City of Oxford	April 12
City of Hattiesburg	April 12
Jackson County	April 26
Three Rivers SWMA/Lee County	April 26
Golden Triangle SWMA	April 26
Madison County/Ridgeland	May 17
Wayne County	May - TBD
Pearl River County	Fall - TBD

Photos from an HHW day in Tupelo.



The dates listed represents the best available information at the time of publication. These dates are subject to change and other community events may be added in the near future. Contact local city or county officials for more details. Other counties, municipalities and solid waste authorities may apply to conduct HHW events by submitting a grant application by October 1 or April 1 of each funding year through MDEQ's Solid Waste Assistance Grants Program. For more information on Solid Waste Assistance Grants or on a particular event in your area, contact Luis Murillo or Denise Rodgers at 601-961-5171.



Business E-Waste Day



Friday, April 25, 2014



MS Farmers Market 929 High Street Jackson, MS 39202 8:00 a.m. to 2:00 p.m.

Bring any unwanted electronics to the Mississippi Farmers Market, Friday, April 25, from 8:00 a.m. to 2:00 p.m. Doing so will lighten the electronic waste from their offices in an environmentally friendly way!

Acceptable Items:

Computers, All Computer Components, Desktop Copiers, Fax Machines, Radios, Televisions, Cell Phones,
Desk Phones, VCR Players, DVD Players, Electronic Games, Monitors, Keyboards, Printers, Laptops,
Scanners, Stereos/Radios

There is a \$2 charge per monitor & \$12 charge per television

This charge covers the cost incurred by Magnolia Data Solutions from recycling these items properly and in keeping with EPA requirements (i.e. shipping and weight for CRT tubes.) All items collected are properly recycled at Magnolia Data Solutions.

For more information on this event, please contact Jenny Woodruff at (601) 948-7575, ext. 231 or email iwoodruff@greateriacksonpartnership.com or contact Marsha Hobson at (601) 366-4842 or email keepiack@bellsouth.net.

This e-Waste day is brought to you by the following organizations





















ADOPT-A-STREAM WORKSHOP

The Mississippi Wildlife Federation along with the Mississippi Department of Environmental Quality will hold a two-day Adopt-A-Stream workshop at Holmes County State Park near Durant on June 17 to 18, 2014.

Adopt-A-Stream is a program that promotes environmental stewardship through training workshops, outdoor field activities and by introducing participants to watershed action projects.

The two-day program provides an in-depth study of watersheds, as well as hands-on training in chemical and biological parameters important to a healthy stream. In addition, the workshop will:

- ► Increase awareness of nonpoint source pollution
- ▶ Introduce surveying and mapping of a watershed
- ► Increase watershed protection awareness and possible actions that can be taken to help your watershed.
- ► A new model of *It Begins at Home*. With ideas about projects such as:
 - ► Storm Drain Marking
 - ► Stream Clean-ups
 - ► Recycling
 - ► Advocacy and More

Who Should Participate?

Educators, land managers, advocacy groups, Scout troop leaders, Envirothon Team advisors, watershed team leaders, environmental educators, concerned citizens, and others. For teachers, two CEU credits are available.

Registration Information

Registration is available on the Mississippi Wildlife Federation/Adopt-A-Stream website: www.mswildlife.org/AAS/ or by contacting Debra Veeder, Adopt-A-Stream Coordinator at (601)605-1790 or dveeder@mswf.org.

FAMILY TIME AT THE 2014 MISSISSIPPI GEM AND MINERAL SOCIETY ROCK SHOW AND THE FOSSIL ROAD SHOW

David T. Dockery III, Office of Geology

The Mississippi Gem and Mineral Society's (MGMS) 55th Annual Gem, Mineral, Fossil, and Jewelry Show at the Trade Mart Building on February 22 to 23 and the 11th Annual Fossil Road Show at the Mississippi Museum of Natural Science on March 1, 2014, were opportunities for families to bring their rocks and fossils for us to examine (or just see) and for the Office of Geology to connect with the rock-and-fossil-happy public. U.S. Senator Thad Cochran was in the Saturday morning crowd at the rock show wearing a "wire wrapping" (a jewelry-making technique) badge. With a Gem and Mineral Society-like badge, I thought that he must be a Thad Cochran lookalike. I went for a closer look, and he held out his hand and said, "I'm Thad Cochran." Senator Cochran was nice enough to stop by our booth for a picture (Figure 1, left) and chat for a while. Of interest to me was that Senator Cochran worked on oil and gas cases as an attorney, knew former State Geologist Fred Mellen, and used him as an expert witness. In Figure 1 (at right) at the Office of Geology booth, is Ann Parker, who worked for longtime MGMS member Dr. Brookes, and her grandson Noah Derrick, a record holder on the Sunkist Swim Team.



Figure 1. Left, Senator Thad Cochran at the Office of Geology booth. Right, Ann Parker and grandson Noah Derrick; Ann worked for the late Dr. Brookes, a dentist and longtime member of the Mississippi Gem and Mineral Society, who did lapidary work faceting gemstones; Noah is a record holder on the Sunkist Swim Team, the team that placed #1 in the 2014 state meet at Tupelo, Mississippi...



\$1,800 aquamarine crystals from Gilgit, Pakistan, at the MGMS rock show.

We also enjoyed seeing past Office of Geology (OG) employees such as Jack Moody with his granddaughter Savannah Stevens and Don Bates with his wife Greta, son Jack, and daughters Madison, Amelia, and Meredith. From MDEQ's Office of Land and Water Resources Paul Parrish attended with his wife Julie and daughter Laken, and OLWR Director Kay Whittington was at the Rock Show with her son Charlie (Figure 3).



Figure 2. Former Office of Geology employees. Left, Jack Moody and granddaughter Savannah Stevens. Right, Don Bates with wife Greta, son Jack, oldest daughter Madison, and twins Amelia with headband at left and Meredith at right.



Figure 3. Office of Land and Water Resources families. Left, Paul Parrish with wife Julie and daughter Laken. Right, Kay Whittington and son Charlie.



The ammonite specimen has its original shell preserved as the gemstone ammolite.

James Starnes (OG) brought his daughters Abby and Gracie (Figure 4, left). Abby and Gracie, along with team members Nicholas and Noah Derrick (Figure 4, right), swam for the Sunkist Swim Team at the Short Course Mississippi Swimming State Championship on February 27 to March 2, in Tupelo. Figure 5 shows a mother and daughter with their prized fossil from chert gravel, the extinct Paleozoic marine snail genus *Bellerophon* (the first one reported from Mississippi gravel). The Rock Show is an opportunity for university geology departments to recruit new students. Figure 6 shows the Mississippi State University booth (at top), the University of Southern Mississippi (middle), and the University of Mississippi (bottom). The big fellow standing at left in the Mississippi State University booth is Luke Thompson, a graduate student and son of David Thompson (OG).



Figure 4. Swim team champions. Left, James Starnes with daughters Abby (left) and Gracie (right). Right, Sunkist state swim team champions, from left to right, Abby and Gracie Starnes and Nicholas and Noah Derrick.



Figure 5. Left, Mother and daughter with a fossil from driveway gravel. Right, first record of a fossil *Bellerophon*, an extinct marine snail shell, from Mississippi chert gravel; the slitband or selenizone can be seen down the median line of the shell.



Figure 6. University geology departments. Top to bottom, Mississippi State University, University of Southern Mississippi, and the University of Mississippi.



Natural cross in petrified wood brought to the Fossil Road Show.

The Mississippi Museum of Natural Science's (MMNS) Fossil Road Show was a second opportunity to see rocks and fossils brought in by the public, such as the Devonian trilobite tail (pygidium) found in driveway gravel as shown in Figure 7.



Figure 7. Left, family showing a fossil from Mississippi chert gravel. Right, an eroded Devonian trilobite tail or pygidium similar to that of *Huntonia*.

In Figure 8, a mother and son donate the largest mosasaur tooth known from Mississippi. Robin Persons, director of the Historic Jefferson College Museum at Washington, Mississippi, brought some of the museum's specimens. Of particular interest was a chert block with large trilobite fossils of the genus *Huntonia* from the Devonian Ross Formation in Tishomingo County, Mississippi (Figure 9).



Figure 8. Mother donates one of the largest known mosasaur teeth from the Cretaceous of Mississippi to the Mississippi Museum of Natural Science.



Dinosaur toe bone donated to the MMNS at the Fossil Road Show.



Figure 9. Left, Robin Persons, director of the Historic Jefferson College museum at Washington, Mississippi. Right, a specimen from the museum's historical collections consisting of a chert block from the Devonian Ross Formation in Tishomingo County with trilobite fossils of the genus *Huntonia*.

Finally, in Figure 10 (at left), representing naturalist families at the Fossil Road Show are MMNS director Libby Hartfield, married to biologist Paul Hartfield with the U.S. Fish and Wildlife Service's Mississippi Ecological Services Field Office in Jackson, and MMNS special events coordinator Nicole Phillips, married to MMNS pale-ontologist George Phillips. In Figure 10 (at right) is a budding naturalist showing her chert gravel fossils with the help of her grandfather.

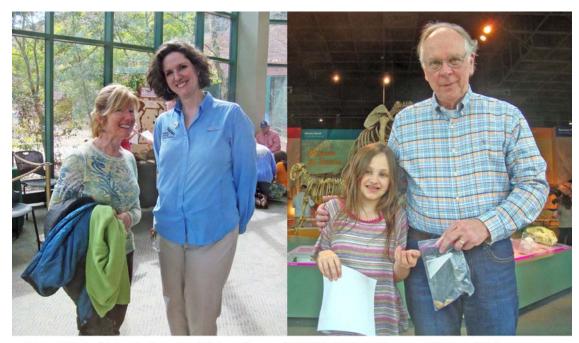
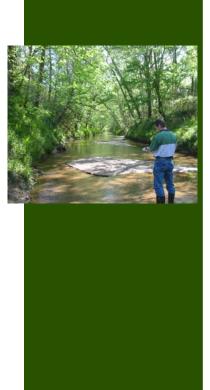


Figure 10. Left, two ladies married to malacologists: Mississippi Museum of Natural Science director Libby Hartfield (left) married to Paul, an expert in recent freshwater mussels, and museum special events coordinator Nicole Phillips (right) married to George, who is an expert in all things fossil, including fossil mollusks. Right, grandfather and granddaughter show their chert fossils.



MDEQ ENVIRONMENTAL ACTION LINKS

- Draft permits currently at public notice, http://opc.deg.state.ms.us/publicnotice.aspx.
- Permits and certificates issued in the last 90 days, http://opc.deg.state.ms.us/report_permits.aspx.
- General permit coverages issued in the last 90 days, http://opc.deq.state.ms.us/report_gnp issued.aspx.
- Notices of Intent for coverage under a Statewide General permit received by the Environmental Permits Division, http://opc.deg.state.ms.us/report_gnp notice.aspx.
- List of the 401 Water Quality Certifications currently at public notice, http://opc.deg.state.ms.us/report_wqc_public_notice.aspx.
- List of the compliance inspections recently conducted, http://opc.deg.state.ms.us/report_eced_tasks.aspx.
- Orders issued by the Mississippi Commission on Environmental Quality, http://opc.deq.state.ms.us/report_orders.aspx.

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PICTURE OF THE MONTH

Sunset in Pachuta, Mississippi.

Taken by James Starnes, Office of Geology.

