

MISSISSIPPI  
Museum of  
Natural  
Science

is for  
TODAY  
TOMORROW  
TOGETHER

Sustainable Choices Exhibit  
JAN 24 - MAY 10, 2009



The *Sustainable Choices* Exhibit allows you to explore the way everyday actions affect our earthier neighbors.

This interactive exhibit, organized by NRG! Exhibits, explores the concept of sustainability, and the choices that each of us make every day. Sustainability, or meeting the needs of the present without compromising the ability of future generations to meet their own needs, is an increasingly important topic as the world's population and consumption expands. *Sustainable Choices* engages visitors with thought-provoking content, interactive exhibits and live animals.

"Museum Educators use live animals in the exhibit, including box turtles and alligators, to help visitors link their daily choices with how they affect our habitat and wildlife," explains Libby Hartfield, Museum Director. For instance, we choose daily into which bags to put our groceries and how we wash our clothes. This exhibit will clarify some of these simple choices.

Regular household objects and tasks (food, plastic bags, laundry, etc.) are presented larger than life in seven themed modules.

"The Mississippi Department of Environmental Quality is pleased to be part of this unique exhibit. One of our agency's goals is to provide information to Mississippians about the importance of water conservation, the impact they have every day on water quality, and opportunities for people of all ages to help. We believe this exhibit will help us inform visitors about these ideas, and we encourage everyone to take advantage of this engaging exhibit," said Trudy Fisher, MDEQ Executive Director.

*Sustainable Choices*, organized by NRG! Exhibits, is made possible by the support of our lead sponsor Entergy, and other generous supporters including Mississippi Department of Environmental Quality, Jackie & Avery Rollins, Emme Wells, plus many more. (See page 10 for entire list).



to put our groceries and how we wash our clothes. This exhibit will clarify some of these simple choices.



ANNOUNCEMENTS



Jr. Duck Stamp Competition

Deadline is March 15, 2009  
Call for more details.

Color Pencil Illustration  
by Anne Elise Rinehart.  
She won *Best of Show* in the  
2008 Mississippi Junior  
Duck Stamp Art Competition.



Join Libby Hartfield on  
Thursday mornings at 9:00 for  
"Creature Comforts", a call-in  
radio show on MPB  
about all the critters in Mississippi.

THIS SUMMER

Monsters of the Deep

June 13, 2009 - January 8, 2010  
Aquatic Giants in Flesh and Bone!

VOL. 27 • No. 1  
WINTER/SPRING 2009

T IS FOR TURTLE & TREE FROG & TURKEY & T....

THE NATURAL NEWSLINE IS SPONSORED IN PART BY  
THE JACKSON CONVENTION & VISITORS BUREAU.

MISSISSIPPI  
Museum of  
Natural  
Science

MISSISSIPPI DEPARTMENT OF  
WILDLIFE, FISHERIES AND PARKS

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Heather Sullivan BOTANIST  
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Jeremy Copley COLLECTIONS/RESEARCH ASSISTANT  
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Susan Murray CONSERVATION GENETICIST  
Scott Peyton COLLECTIONS MANAGER  
George Phillips PALEONTOLOGY CURATOR  
Kathy Shelton BIOLOGIST  
Todd Stack, Ph.D. ICHTHYOLOGIST  
LaToya Turner LABORATORY ASSISTANT  
Nicholas Winstead ORNITHOLOGIST



The Museum of Natural Science is all about choices this year. Our newest exhibit, *Sustainable Choices*, helps us all think through the dozens of small decisions we make each day as we go about our lives. Our choices affect wildlife habitat today and the environment our children will live in tomorrow. Finding ways to meet our needs today, without compromising our future, is possible if we make smart choices.

The Museum will also be making careful choices when it comes to budgeting this year. The economic climate is as important to the survival of the Museum of Natural Science as is the ecological environment. We all know there will be cuts to the state budget, and I am working to retain as much state general funding as possible, looking at ways to maximize federal and private funding. We will still need to trim our spending and in some areas we may have to provide fewer services than we have provided in the past.

Despite the dire financial news, I am very optimistic about the coming year. We are pleased to report that the past six months attendance at the Museum has been up 32% over the same period in 2007. If that increase continues, we will share our conservation message with more than 200,000 visitors in the Museum and with an additional 150,000 in outreach programs around the state. We have always depended on you, our friends in tough times, and I have good reason to believe you will be with us during the coming year.

*Libby Hartfield*  
Libby Hartfield  
MUSEUM DIRECTOR

NEW STAFF



**Susan Murray** is the new conservation geneticist and will be working with a variety of vertebrate and invertebrate species. Previously, she worked at LSU's Museum of Natural Science as a researcher and the DNA lab manager. She will soon earn her PhD in biology from Boston University.



**Joelle Carney** is the new Database Manager for the Mississippi Natural Heritage Program. She holds a M.S. degree in Forestry from Mississippi State University and previously worked for MSU's Forestry Department as a GIS specialist.

AWARDS



The Museum was recently honored as *Travel Attraction of the Year* by the Mississippi Tourism Association and *Best Museum* by the Jackson Free Press Best of Jackson 2009.

2008 Informal  
Science Teacher of the Year



Sheila Smith, Mississippi Science Teachers Association president and also a member of the board of directors of the MMNS Foundation, presented the 2008 Informal Science Teacher Award to **Andrew Whitehurst**, Scenic Streams Stewardship Program Coordinator at the Mississippi Museum of Natural Science. A Museum staff member since 2001, Andrew teaches in Adopt-a-Stream, Mississippi Envirothon, and participates in Museum education programs featuring rivers, floodplain connectivity, and aquatic ecology.

Fossil Road Show  
Pack up your fossils and hit the road!

Bring your favorite fossils and get expert opinions about their ages and identities from our team of scientists at the 6th Annual Fossil Road Show, patterned after the popular "Antiques Road Show". Fossils from the Museum collection will be on display and presentations on interesting fossil subjects will be offered.

In 2007, a young boy brought a fossil he found at the Ross Barnett Reservoir to Paleontology Curator George Phillips for identification. The fossil, which was the size of the boy's palm, was identified as a fossil shark tooth of a 30 foot *Carcharocles auriculatus* (eared big-tooth shark) from the Eocene epoch, about 35 to 34 million years old! Who knows what might turn up at this year's Fossil Road Show? The Fossil Road Show provides the opportunity for the public to share their fossil finds and to learn more about fossils in general. There is no fee, other than regular Museum admission, to attend the event and reservations are not required.



Photo by James Patterson

QUICK CALENDAR

Fossil Road Show

SAT · MAR 7  
10AM to 3PM

NatureFEST!

SAT · APR 4  
10AM to 5PM

International Migratory Bird Day

SAT · MAY 9  
10AM to 3PM

Snake Day: Mississippi Style

TUE · JUN 2  
10AM to 3PM  
Presentations at 10AM - 11AM and 12NOON - 1PM



Nature-FEST!  
Celebrate the natural world around you.

It's a family festival, a nature outing, and a fascinating trip to the Museum, all wrapped into one exciting day! (See page 4 for details.)

International Migratory Bird Day  
Come on over to their stopover.

Migrate to the Museum's grounds and nature trails, favorite stopovers for birds that fly between their breeding grounds in North America and their wintering grounds in Central and South America. We'll gather for bird watching, nature hikes, and more. Join the fun and help support migratory bird conservation.

Snake Day: Mississippi Style  
Don't let this one slip by.

Biologist Terry Majure will help you spot the differences between venomous and non-venomous snakes in Mississippi, separating myth from accurate information about the value of native snakes in the ecosystem. Catch one of Majure's interactive discussions offered from 10:00am - 11:00am and Noon - 1:00pm. Live snakes will be exhibited from 10am - 3pm, with experts on-hand to answer your questions.

SPEAKER: Terry Majure, Museum Aquarium Coordinator (Retired)

SNAKE EXHIBITS: Terry Vandeventer, Living Reptile Museum, Terry, Mississippi



Photo by James Patterson

## Ninth Annual NatureFEST!



Photo by James Patterson

The Museum opens its doors and outdoor spaces for a celebration of nature.

Now in its ninth year, *NatureFEST!* will get you in the swing of spring Saturday, April 4, from 10:00am to 5:00pm. It's a family festival, a nature outing, and a fascinating trip to the Museum, all wrapped into one exciting day!

Come meet the "Snake Man", Terry Vandeventer. Enjoy birds of prey demonstrations. Watch divers feed the fish in the giant Museum aquariums, and experience other live animal presentations by the Museum education staff. Go behind the scenes with our scientists and researchers to learn about some of their unique research tools. Discover how valuable specimens in the Museum Collections are acquired and maintained.



Steve Trash, Rockin' Eco Hero

Don't miss the "Steve Trash Big Green Show" featuring Steve Trash the Rockin' Eco Hero! Steve Trash is amazing at integrating magic, trash, and music into a lightning fast, fun, and amazing show. His wholesome, green entertainment and ecological magic tricks are sure to delight and enlighten you.

Visit with Jim Henson's "Sid the Science Kid" from the new educational animated television series which uses comedy to promote exploration, discovery and science readiness among preschoolers! This landmark production is co-produced by The Jim Henson Company and KCET/Los Angeles for PBS KIDS.

Inhale spring's sweet aromas on our nature trails. Botanists and volunteers will guide tours and the Native Plant Garden will be in full bloom. Catch the native plant sale and take home something green.



Photo by James Patterson

Check out the latest outdoor equipment, demonstrated by Buffalo Peak Outfitters, and try your hand paddling around Mayes Lake! Canoe on the Pearl River with John Rusky of the Quapaw Canoe Company. Come celebrate with us!



Photo by James Patterson

## Counting Turtles: Long Term Research on the Ringed Sawback

by R.L. Jones, Ph.D., MMNS Herpatologist

The ringed sawback (*Graptemys oculifera*) is a federally listed turtle found only in the Pearl River watershed of Mississippi and Louisiana. Turtles are generally long-lived animals, and effective management of long-lived species requires long-term research and observations. Personnel at the Museum have been monitoring populations of this species at five locations on the Pearl River since 1988. The study sites are two or three mile segments of the river and are located in Leake, Madison, Rankin, Lawrence, and Marion counties. Ringed sawbacks at these sites have been captured, measured, and marked during the initial work in 1988 and 1989, and again in 1994, 2002, and most recently in 2008. Two types of marks are used. Permanent marks give each turtle an individual code and are used to estimate growth, longevity, and survival. Temporary marks allow an estimation of population sizes using a procedure known as a mark-recapture model.



Closeup of a female ringed sawback turtle

Over 3,500 Ringed Sawbacks have been captured, measured, and marked during this study. During the 2008 segment, six turtles (two males and four females) originally marked in 1988 were recaptured. One male and three females were adults when first captured in 1988, and based on the projected ages at maturity for this species, which were derived using data from the study, the male when recaptured in 2008 was a minimum of 23.5 years old. Female ringed sawbacks mature at a minimum of about 10 years of age, so in 2008, the recaptured females were at least 30 years old, and may have been considerably older. These data and others from the study have enabled us to estimate not only age at maturity and longevity but population trends, growth rates, and numerous other population parameters which are essential in making management decisions for the species.

## New Addition: De La Cruz Marine Invertebrate Collection

by George Phillips, MMNS Paleontology Curator

When I was a student in Biological Sciences at Mississippi State University, there was an impressive collection of marine macroinvertebrates on prominent display in Harned Biology Building. The material included univalves (snails), bivalves (clams), corals, horseshoe crabs, true crabs & lobsters, squid, various echinoderms (sea urchins & sea stars), and a couple of vertebrates. The specimens were arranged, largely systematically, in antique wood and glass cases located in the center and along the walls of Harned's first and second floors. The exhibits were admired daily by the throng moving through the biology building and were a



source of education, conversation, and inspiration to all the young biologists who wandered by, including me.



Dr. Armando de la Cruz, Emeritus Professor of Biological Sciences at MSU, created the exhibit from specimens he personally accumulated over a fifty year career, dating back to his undergraduate work at the University of the Philippines: "I have used the collection as a teaching tool in my general zoology and invertebrate zoology classes in the study of animal diversity." As he has now retired and there are no plans to utilize the material in the soon-to-be renovated biology building, Dr. de la Cruz has generously donated the collection to the Museum of Natural Science.

ONGOING

**Come On Outside!**

Visit the Museum's Native Plant Garden and nature trails to experience the wonders of the season in Mississippi. You'll find trail markers and signs identifying plants and habitats. So come on outside and discover the rich variety of Mississippi flora!

**Fish Feeding**

Meet some of our most fascinating aquarium inhabitants, every Tuesday and Friday at 10AM, and Sunday at 2PM.

**Creature Features**

Scheduled or spontaneous, these informal programs feature live or mounted animals. Scheduled every Saturday at 10AM and 2PM, Creature Features make learning fun!

**First Tuesdays**

**Naturalist Lecture Series**  
On the first Tuesday of the month (except Dec and Jan), the Museum offers lectures addressing a variety of natural science subjects. Unless noted otherwise, the lectures take place from 12NOON to 1PM in the Museum's Rotwein Theater.

Lectures are free to Museum Foundation members or regular admission visitors. Please show your membership card at the gate. Regular Museum fee: \$5 for adults; \$4 for senior citizens; \$3 for children; \$2 for students with teachers. Members also receive a ten percent discount at The Dragonfly Shoppe.

**NOW THROUGH MAY 10** • SPECIAL EXHIBIT  
**Sustainable Choices: Today, Tomorrow, & Together**  
Interactive exhibits and live animals help you explore the way our everyday actions affect our earthier neighbors.



**MAR 7** • SAT • 10AM-3PM • EVENT  
**Fossil Road Show**  
Patterned after the popular "Antiques Road Show", fossil experts will help visitors identify their fossils and determine more about their own fossil collections.



**MAR 3** • TUE • 12NOON-1PM • LECTURE  
**Beyond Etouffée: Mississippi Crawfishes**  
SPEAKER: Susan B. Adams, Ph.D. USDA Forest Service, Southern Research Station, Center for Bottomland Hardwoods Research, Oxford, MS  
Crayfish (aka crawfish, crawdad, or mudbug) live around the world and range in size from smaller than a little finger to big enough to break a person's arm. They vary in color from dull to brilliant. With more than 63 species, Mississippi has one of the highest crayfish diversities in the world. Dr. Adams will present a brief global tour of crayfish and then bring it home to Mississippi with discussion of our species, their habitats, conservation issues, and ongoing research.

**MAR 15** • SUN  
**Jr. Duck Stamp Competition**  
Deadline for entries. Call for more details.



**APR 4** • SAT • 10AM-5PM • EVENT  
**NatureFEST!**  
Bring the family for a fun celebration of nature – starring snakes, birds of prey, and fish. Also visit with Steve Trash the Rockin' Eco Hero and "Sid the Science Kid". See page 4 for details.

**APR 7** • TUE • 12NOON-1PM • LECTURE  
**Sustainability and the Intrinsic Value of Mississippi's Natural Capital**  
SPEAKER: Larry Jarrett  
Co-Founder, Natural Resources Initiative of North Mississippi & Consultant on Sustainability and Natural Resources  
Join Larry Jarrett for an enlightening discussion of the social, environmental, and economic aspects of a sustainable community, how these issues are interrelated, and the need to address them holistically.

**MAY 5** • TUE • 12NOON-1PM • LECTURE  
**Sustainable Building Practices**  
SPEAKER: Anne Somers  
AIA, Cooke Douglas Farr Lemons Architects and Engineers, Jackson, MS  
How can small changes in building practices make large impacts on sustainability? Join architect Anne Somers to learn how the U.S. building industry is responding to increased energy costs by implementing dramatic changes in design and construction practices.



**MAY 9** • SAT • 10AM-3PM • EVENT  
**International Migratory Bird Day**  
Gather for bird watching, nature hikes, and lots of hands-on activities. Join in the fun and help support migratory bird conservation.

**MAY 10** • SUN • SPECIAL EXHIBIT  
**Sustainable Choices**  
Exhibit closing date

**JUN 1-4** • 9AM-12NOON  
**Camp WILD**  
Entering K-grade 1; 2 sessions (Limit 16 per session)

**JUN 2** • TUE • 10AM-3AM • EVENT  
**Snake Day: Mississippi Style**  
See live Mississippi snakes on exhibit, and learn from the experts who will be on hand to answer your questions.



**JUN 2** • 10AM-11AM & 12NOON-1PM • LECTURES  
**Snake Day Lectures: De-mystifying MS Snakes**  
SPEAKER: Terry Majure  
Aquarium Coordinator, Mississippi Museum of Natural Science (Retired)  
Learn the value of our native snakes and how to distinguish six venomous species from fifty-five non-venomous ones found here.

**JUN 5** • FRI • 10AM-12NOON  
**Fun Fridays**  
Interactive, hands-on programs with topics that coordinate with the "Monsters of the Deep" exhibit opening at the Museum on June 13, 2009. An adult must accompany children.



**JUN 6** • SAT • 7AM-10:30AM • EVENT  
**Katfishin' Kids at Turcotte Lab**  
Fun fishing at Turcotte Lab off Hwy 43 at Ross Barnett Reservoir, for ages 15 and under, accompanied by adults. Equipment and refreshments are free.

**JUN 8-11** • 9AM-12NOON  
**Camp WILD**  
Entering grade 2-3; 2 sessions (Limit 16 per session)

**JUN 12** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**MONSTERS OF THE DEEP**  
**JUN 13-JAN 8, 2010** • SPECIAL EXHIBIT  
**Monsters of the Deep: Aquatic Giants in Flesh & Bone**  
The exhibit includes displays from aquatic prehistory to the whales, sharks and turtles that inhabit our oceans today. Don't miss the 21 foot, fleshed-out, 50-million year old toothed Zygorhiza whale!

**JUN 15-18** • 9AM-12NOON  
**Camp WILD**  
Entering grade 4-5; 2 sessions (Limit 16 per session)

**JUN 19** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**JUN 26** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**JUL 3** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**JUL 6-10** • 9AM-3PM  
**Camp WILD (overnight Thursday)**  
Entering grade 6-7; 1 session (Limit 24) (Junior Naturalist)

**JUL 10** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**JUL 17** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**JUL 24** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

**JUL 31** • FRI • 10AM-12NOON  
**Fun Fridays**  
Hands-on activities for everyone.

ONGOING

**First Saturdays**

**Audubon Bird Walks**  
On the first Saturday of the month (except Dec and Jan) join experienced birders and Jackson Audubon Society members for a walk on the wild side. Bird walks for family groups and beginners are from 8AM to 10AM at Lefleur's Bluff State Park Campground. Fee: \$3. For more information, call Mary Stevens at 601.956.7444.

TEACHERS

**WET and WILD CEU Credits for Teachers**

The Museum offers two environmental education programs, Project WILD and Project WET, with CEU credits available. For details, contact Angel Rohnke or Rebecca Jones at 601-354-7303.



**Teacher Resources**

To schedule a workshop or field trip, reserve a resource kit, download classroom materials, or learn more about how our Museum can help meet your classroom needs, call 601-354-7303 or visit [www.ms-naturalscience.org](http://www.ms-naturalscience.org).

**PRESCHOOL:** The Museum's "hands-on" Preschool Discovery Room is designed specifically for pre-kindergartners, ages 3-5.



**Visitor Access**

**PRESCHOOL CHILDREN**  
MON-FRI 1-4PM  
SAT 9:30AM-12NOON & 1-4PM

**TIME FOR TWOS (AGES 2 & UNDER)**  
2nd TUE 1-4PM

**STORY TIME (AGES 3 TO 5)**  
WED 1:15, 2:15, & 3:15PM (AUG-MAY)  
TUE AND THU 10:15 & 11:15AM (JUNE-JULY)

\*The Preschool Room is open when a staff member or a volunteer is available. Schedule subject to change.

**Reserved Group Access**

**MARCH-MAY CLASSES**  
**"So It Begins Again! Spring!" - Explore New Life**

Children will appreciate the miracle of spring – a truly amazing time of year!  
Class times are 9:00, 9:45, and 10:30am  
Monday through Friday. Call Joan Elder for reservations (601-354-7303 ext. 136).

Call  
**601.354.7303**  
for information, reservations & resources

**JUNE CLASSES**

**"MAPP!" – a study of marine animals past and present!**  
Children will appreciate the diversity of marine animals from ancient times to present day. Class times are 9:00, 9:45, and 10:30am  
Monday, Wednesday, and Friday.  
Call Joan Elder for reservations (601-354-7303 ext. 136).

**JUNE/JULY SUMMER CAMPS**

**"Ocean Wonders" – sharks, turtles, and whales – past and present!**

**Camp Session I**  
9:30AM-10:30AM (age 2)  
11:00AM-NOON (ages 3-5)

**Camp Session II**  
9:30AM-10:30AM (ages 3-5)  
11:00AM-NOON (ages 3-5)

Preschool Camp is offered this year in two duplicate sessions. Each Camp, running for three consecutive Mondays, offers one-on-one, hands-on natural science experiences for children and their caregivers. Each camp is set up for 16 participants – eight children, each with one adult. Call Joan Elder for reservations (601-354-7303 ext. 136).

Preschool Camps are offered on the following dates:

**Camp Session I**  
June 1 (whales)  
June 8 (sharks)  
June 15 (turtles)

**Camp Session II (repeat)**  
June 22 (whales)  
June 29 (sharks)  
July 6 (turtles)

The Preschool Room is open when a staff member or volunteer is available. The schedule is subject to change. Please inquire.

## Sustainable Choices in Fishing

by Karen Dierolf, Aquatic Biologist

Fishing and fishing-related activities contribute significantly to the economic well-being of citizens on a national level as well as in Mississippi.



Approximately 586,000 people fish annually in Mississippi - each spending \$363. These figures indicate a direct economic impact of more than \$211 million annually to our state. Fishing and fishing activities also have cultural, sociological and psychological values which are difficult to assess but are important nonetheless.

As any visitor to the Natural Science Museum knows, the aquariums are home to hundreds of fish. However, most people may not know that the principle source of funding to maintain the aquariums comes from federal dollars. Aquatic Resources Education dollars are designed to foster, promote and encourage aquatic education. The Museum uses these funds in three ways; the native fish aquariums, aquatic education presentations and publications, and off-site aquatic education programming.

During a visit to the Museum visitors are shown the tremendous diversity of fish and the habitats in which they live, throughout our state. Visitors can see the fish in action during our public fish feedings Tuesdays and Fridays at 10:00am and can watch a volunteer SCUBA diver feed the fish on most Sundays.



### DON'T MISS

#### Fish Feedings

Tuesdays & Fridays  
10am

#### Katfishin' Kids

Saturday, June 6  
7am - 10:30am

To learn even more about fish, beginner anglers can learn the basics of fishing during our annual "Katfishin' Kids" event the first Saturday in June. And for the more experienced anglers, our annual "Got Fish?" seminars on the first Saturday in February provide the opportunity to learn fishing tips and tactics from some of the state's most accomplished anglers.

### IN MEMORIAM

**Lucy Blue**  
1992 - 2008



The aquariums staff is sad to report the passing of one of our beloved catfish. "Lucy Blue", the large white blue catfish in the Pearl River Aquarium, died this fall of liver failure.

The fish was sent to Aquatic Animal Health at the Thad Cochran National Warmwater Aquaculture Center in Stoneville, MS for necropsy. There it was determined that "Lucy Blue" was approximately 16 years old, which is rather old for a catfish. To everyone's surprise it was also found that "Lucy Blue" was a male, not a female as was thought all these years. "Lucy Blue" came to the Museum in 2002 after being caught by commercial fishermen in the Mississippi River near Greenville, MS. He weighed in at approximately 60 pounds and at the time of death weighed 86 pounds. The skeleton of the fish is being preserved for study.

## Experiments in Problem Solving

by Andrew Whitehurst, Scenic Streams/Natural Areas Coordinator



Best Nature Walk  
MDWFP LeFleur's Bluff  
State Park/Mayes Lake  
SECOND PLACE WINNER:  
MMNS Trails  
by the Jackson Free Press  
Best of Jackson 2009

Student project reduces trail maintenance requirements.

Northwest Rankin High School Senior Tom Buchanan was looking for a senior project and, having built retaining walls for his Eagle Scout project on the Museum's trails, he figured there would be other trail problems that needed solving. So, Tom approached Trails Coordinator Andrew Whitehurst about a project. The two came up with a trash skimmer fence to divert and corral floating trash and reduce the effort needed for trail cleanup after high water. Tom wants to attend Mississippi State University and pursue engineering in combination with environmental science. Tackling the high water floating trash problem gave him a chance to design a solution, build it and see if it worked.



When the Pearl River rises in winter and spring, it covers sections of the trails in the low lying areas of LeFleur's Bluff State Park. Floating trash and other varieties of solid waste are part of every rise of the Pearl River. Eubanks Creek, which flows through the park, is an urban drainage channel and receives a mix of floating solid waste and litter that finds its way in along streets and roadsides via ditches and street drains - all of it ending up in the main channel of the Creek. When the Pearl returns to its channel, and the Creek recedes, a trash cleanup is necessary on both upper and lower sloughs and along the trails. This happens at least once a year.

In November 2008, Tom and several of his Northwest Rankin senior classmates built the fence at an angle across the Museum's upper slough to

intercept the floating trash from Eubanks Creek. The fence has a box corral on its downstream end that can be periodically cleaned out after waters recede. The fence got its first chance to work in the high water after the rain/snow event of the week of December 8th. The fence and corral were functioning well at the 28.5 foot river stage, but as flood waters continued to rise, it became clear that the fence needed a bit more freeboard. So, with his fence's debut Tom learned about "adaptive management", something that all engineers worth their salt run across sooner or later. The Museum welcomes projects that provide hands-on learning and problem solving for students interested in the environment and the natural sciences.

**\$100,000-\$200,000**

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Bryant Mather  
Mississippi Museum  
of Natural Science Foundation  
U.S. Fish and Wildlife Service

**\$50,000-\$100,000**

BellSouth  
Magalen O. Bryant  
& Tara Wildlife Management  
Community Foundation of Greater Jackson  
Chevron  
Entergy  
Environmental Protection Agency  
Friede Goldman  
Gannett Foundation/The Clarion-Ledger  
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Dr. & Mrs. Steve Zachow

**Steadfast  
Supporters**

Without loyal patrons and sponsors, our work would be impossible.

Special thanks go to the following for their support of the current exhibit:

**"SUSTAINABLE CHOICES"**

Entergy  
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All members enjoy free admission to the Museum, invitations to members-only events, a subscription to our newsletter, and discounts at the Dragonfly Shoppe. Higher levels of membership receive additional benefits, such as public recognition of their contributions, additional admission passes, and even the private use of Museum facilities. And all memberships entitle you to free admission to more than 200 other museums nationwide through a reciprocal membership program.

Call 601.354.7303 for more information.



Dudley and Robbie Hughes—Dudley was recently honored by the Association of Fundraising Professionals for his philanthropic support of the Museum.



Liz Brister and Danny Blanton with Entergy, presenting exhibit sponsorship to Libby Hartfield

**Museum Volunteers Love Learning!**

by Ann Peden, Volunteer Services

**Hike and Learn**

We finished 2008 with two field trips, one to Crosby Arboretum in Picayune, MS and one to Columbus, MS for a fossil collecting expedition.

We are never done exploring natural Mississippi. "Hike and Learn" times have become an ongoing part of our volunteer program. We get some fresh air, enjoy the good company of fellow volunteers and learn about the natural world right outside of the Museum's backdoors. A staff member leads each hike, helping us learn about a specific part of the ecology and natural history of this area. The next "Hike and Learn" time, just for Museum volunteers, will be on March 9, from 9:00am – 10:30am.

Long-time Museum volunteer Betty Anne Hays says of the "Hike and Learn" sessions:

"Each was a unique adventure that taught me more about the rich resources we have on the Museum property. Heather Sullivan taught us about trees with three different shapes of leaves. I didn't know poison ivy could be so pretty! Corey Wright gave us an exciting morning searching for deer, raccoon, rabbit and beaver tracks right in the middle of our busy city. Nicole Smith's quiet meditation walk was a unique blessing as we looked at the majestic fall colors and returned rested and refreshed to our everyday tasks.

The Museum has so many riches in the uniquely talented and learned individuals who work there and also in the natural beauty of the acres which surround it."

To support the Museum and join us on our next learning adventure, contact Ann at ann.peden@mmns.state.ms.us or 601-354-7303.



Dixie Houchen working hard for a great find

**JOIN MMNS TODAY!**

The Mississippi Museum of Natural Science Foundation was established to support the mission of the Museum through fundraising and volunteer efforts. We invite you to join us in preserving the best of Mississippi's natural world. Individual memberships start at \$35.

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Gift items featured this season that coordinate with the Sustainable Choices Exhibit are:

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The mission of the Mississippi Museum of Natural Science is to promote understanding and appreciation of Mississippi's biological diversity through collections, research, scientific databases, education, and exhibits; and to inspire the people of our state to respect the environment and to preserve natural Mississippi.

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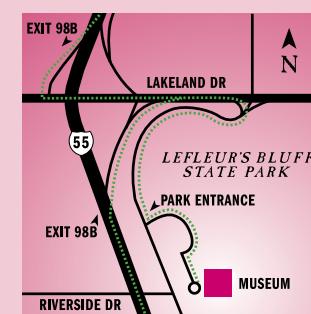


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—within Lefleur's Bluff State Park—



From Interstate-55, take Exit 98B heading east on Lakeland. Turn south onto Highland Drive and left at the Park entrance. Pay admission at the gatehouse.

**MUSEUM HOURS** MON-FRI 8AM to 5PM

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**ADMISSION** Adults: \$5  
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Senior Citizens 60 and over: \$4

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