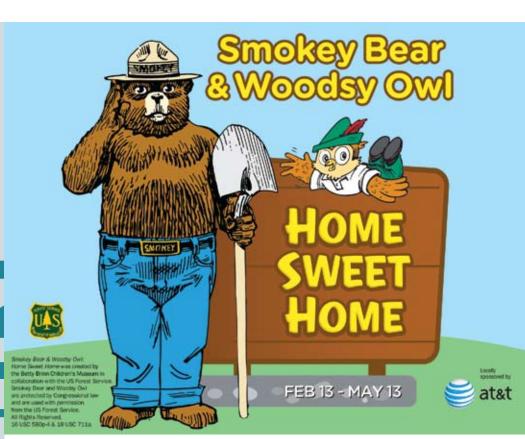
NATURALNEWSLINE

MISSISSIPPI Museum of <u>Science</u>

Vol. 28 • No. I

Winter/Spring 2010



(while supplies last), a book reading by Walt Grayson, hands-on activities and live

"This exhibit is a natural fit with new programs that our education staff is implementing. For instance, Growing Up WILD is an early childhood education and training program for educators and caregivers that builds on children's sense of wonder about nature and invites them to explore wildlife and the world around them," explains Angel Rohnke, Museum Education Coordinator.

Smokey Bear & Woodsy Owl: Home Sweet Home was created by the Betty Brinn Children's Museum in collaboration with the US Forest Service. The exhibit is sponsored locally by AT&T, USDA Forest Service, Anonymous, Dick and Sally Molpus, Feild Cooperative Associates, Inc., Paul T. Benton, Plum Creek, Sanderson Farms, Inc., The Chisholm Foundation, Trustmark National Bank, Dr. & Mrs. Steve Zachow, Family of Catchings B. Smith, the Mississippi Department of Wildlife, Fisheries and Parks, the Mississippi Museum of Natural Science Foundation and other generous supporters.

ANNOUNCEMENTS

Let's Celebrate 10 in 2010

The Museum will celebrate the 10th Anniversary of our new building in 2010. Visit our website and click on The Latest for details.

Jr. Duck Stamp Competition

Deadline is March 15, 2010 Call for more details.



Katelee Laird's color acrylic depiction of a pair of wood ducks won Mississippi Best of Show 2009

WILD about Summer Camp



Camp WILD is a place where kids explore nature and the outdoors while making new friends. For details, contact Nicole Smith, 601-354-7303 nicole.smith@mmns.state.ms.us Foundation Member registration is now open. Download registration forms and FAQ's at www.msnaturalscience.org.

Creature Comforts

Join Libby Hartfield, Dr. Troy Majure, and Kevin Ferrell on Thursday mornings at 9AM on MPB.



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

Two beloved American icons come to life in this educational, interactive exhibit for children.

he Smokey Bear & Woodsy Owl: Home Sweet Home exhibit helps bring kids to nature and nature to kids. Families are encouraged to spend time together outdoors and children are inspired to discover and care for the natural resources that sustain our world our home sweet home. Smokey Bear and Woodsy Owl guide visitors through urban, woodland and stream settings featuring a variety of educational activities, props, costumes and puppets that underscore the importance of protecting ecosystems, as well as highlighting ways to reduce, reuse and recycle resources. Grand Opening activities take place from 11AM - 3PM on February 13th and include a press conference, appearances by Smokey Bear and Woodsy Owl, free tree give-aways

bird demonstrations.

MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES AND PARKS

1

HOME PAGE



Robert Cook Don Brazil COMMISSIONERS Bryan Jones Charles Rigdon William "Billy" Deviney Jerry Munro John C Stanley IV



EXHIBIT

MANAGEMENT

Norton McKeigney

Ray Terry

NATURAL HERITAGE

Sherry Surrette, Ph.D

Joelle Carney

Adrianne Clark

Aaron Francois

Tom Mann

Andy Sanderson

Matt Smith

Heather Sullivan

Andrew Whitehurst

NATURAL AREAS

RESEARCH &

Libby Hartfield

ADMINISTRATION Mary Jenkins Connie Gore Mary Stevens

Harold Garner

Charles Jeffcoat

AQUARIUMS Karen Dierolf Bryan Fedrick

Eric Gregory

John Hardy

Mike Stegall

EDUCATION Angel Rohnke

Mary Alston

Crystie Baker Joan Elder Megan Ellis Jonathan Harris

Yolanda Hawkins Rebecca Jones Isabel Kelly

Andrea Schuhmann

Corey Wright

Lisa Yager, Ph.D. Jeremy Copley R.L. Jones, Ph.D. Sean McGregor CONSERVATION ASSOCIATE BIOLOGIST Susan Murray Scott Peyton Joseph M. McGee Fran Noone Ann Peden Nicole Phillips

George Phillips Matt Roberts Kathy Shelton LaToya Turner Nicholas Winstead ASSOCIATION OF SCIENCE-TECHNOLOGY CENTERS





Dear Members,

The past year has been challenging for all state agencies, including the Museum of Natural Science. However, I am pleased to report that despite the tumultuous economy, the museum is continuing to conduct cutting-edge scientific research, to offer high-quality educational programs and exhibits, and to steward the state's extensive biological collections which number more than a million specimens.

The Museum of Natural Science is making important contributions to education and research, and to enhancing public comprehension and appreciation of science. As you read more about these efforts in this Newsline, I think you will be as proud as I am of what we are accomplishing. In the face of today's economic challenges, we have focused our energies on our most important mission, understanding and conserving our wildlife resources.

Your support has been crucial in the past, and will be even more so in the future. This legislative session will determine the level of service the Museum will be able to provide in the coming years so let your legislators know you appreciate their support for the Museum. Please take the time to read over the list of exhibit sponsors for past exhibits and our current exhibit and let them know how thankful you are for their commitment to conservation. As our state budget shrinks, private funding will be vital to keep the Museum vibrant and active in the future.

As always, I extend my thanks and appreciation.

New Staff



Matt Roberts joined the MMNS staff as Ichthyologist in January, 2010. Matt earned his Ph.D. from Mississippi State University where he examined changes in fish species after construction of the Tombigbee waterway. He comes to us from Trent University where he worked on biotic impacts from river flow alteration.

Awards

Red Rose Award

Libby Hartfield, Director of the MMNS, has been awarded the Red Rose Award from the Delta Kappa Gamma Society International (Pi Chapter). Delta Kappa Gamma promotes professional and personal growth of women educators and excellence in education.



The Red Rose Award is given to an individual who has benefited education. Libby Hartfield is an active member of the Mississippi Science Teachers' Association and has influenced the way that environment is taught within schools. She has sat on committees to develop curriculum and has introduced teachers of Mississippi to programs such as Project WET and Project WILD. As an informal educator she has touched the lives of students for many years.

Family Choice Award

We recently received the good news that Growing Up WILD has won a Family Choice Award!

The Family Choice Awards was founded by the Family Magazine Group, America's largest free parenting publication, and is recognized as the premier resource for the very best in children's and parenting products and services. The Awards recognize the best in children's and parenting resources.



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

D ages and identities from our team of scientists. See fossils from the Museum collection and enjoy interesting fossil presentations. Who knows





ring your favorite fossils and get expert opinions about their what might turn up this year?



Nature-FEST! Come celebrate with us!

t's a family festival, a nature outing, and a fascinating trip to the Museum, all wrapped into one exciting day celebrating the 10th Anniversary of the Museum's

QUICK CALENDAR

Fossil Road Show SAT · MAR 6 10am to 3pm

> NatureFEST! SAT · APR 10 10am to 4pm

International **Migratory Bird Dav** SAT · MAY 1 10am to 3pm

Snake Day: Mississippi Style

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

new building. (the Museum has been operating for 78 years) Step into the mysterious world of bats with bat expert Rob Mies. Meet the "Snake Man", Terry Vandeventer. Enjoy fish feedings, live animal presentations, Research and Collections tours, native plant garden tours, nature hikes and canoeing

International Migratory Bird Day Come on over to their stopover.

igrate 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.





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

quatic Biologist Bryan Fedrick 🥂 will help you spot the differences between Mississippi's venomous and non-venomous snakes. separating myth from accurate information about native snakes' value in the ecosystem. Catch one of Fedrick's interactive discussions from 10AM-11AM and 12NOON-1PM. Live snakes will be exhibited from 10AM-3PM, with experts on-hand to answer your questions. (Snake exhibits provided by MMNS and Terry Vandeventer, Museum Associate).

MISSISSIPPI MUSEUM OF NATURAL SCIENCE

Bringing Out Our Best for Tenth NatureFEST!

Saturday, April 10, 2010; 10AM – 4PM



Spend the day in the middle of nature—inside and outside the Museum.

ow in its tenth year, NatureFEST! will get you in the swing of spring Saturday, April 10, from 10AM to 4PM. It's a family festival, a nature outing, and a fascinating trip to the Museum, all wrapped into one exciting day celebrating the 10th Anniversary of the Museum's new building!! (the Museum has been operating for 78 years)

NatureFEST 2010 is sponsored in part by Merrill Lynch.

Step into the mysterious world of bats and explore their benefits, habitats, and nocturnal strategies with bat expert Rob Mies. Come meet a local bat from North America and hear its highpitched sound with a "bat detector." You will also meet a Straw-colored fruit bat from Africa, and an Asian dog-faced bat. The finale is the largest bat in the world, the Gigantic Flying Fox Bat from Malaysia. This beautiful bat has nearly a 6-foot wingspan!

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.



Visit with Smokey Bear and Woodsy Owl and explore the Smokey Bear & Woodsy Owl: Home Sweet Home exhibit.



Inhale spring's sweet aromas and take guided tours of our nature trails and Native Plant Garden. Catch the native plant sale and take home something green.

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.

he Mississippi Amphibian Monitoring Program (MAMP) is a chapter of the North American Amphibian Monitoring Program (NAAMP). The goal of this program is to monitor frog



and early summer (June).

ring of charcoal fragments.

In June 2007, I found a few harvester beds while surveying for tortoises on a Lamar County sandhill, and hypothesized that they may persist on excessively well-drained soils less readily invaded by fire ants. Scott Peyton, the Museum's Collections Manager, and I have since surveyed over 200 sandhills, primarily in southeastern Mississippi, but

Mississippi Amphibian Monitoring Program

by Kathy Shelton, MMNS South Mississippi Conservation Program biologist; Statewide MAMP Coordinator



populations in Mississippi using a statewide network of volunteers. Each volunteer spends three nights a year running a permanent roadside route with ten stops located at various wetland habitats like ponds, lakes, creeks or swamps. The routes are run at least one night during each sampling

period - in the late winter (late January through February), early spring (mid-April to mid-May)



Green treefrog (Hyla cinerea) photo by Randy Browning

Volunteers start surveys 30 minutes after sunset and record all species of frogs heard during a 5-minute period at each stop, using a calling index. A route typically takes about two hours to complete. Data is then entered online into the nationwide database.

All volunteers must take and pass a frog quiz to participate. The quiz consists of sound files of all frogs that could potentially occur along the route. This guiz can be found at www.pwrc.usgs.gov/ frogquiz and may be taken as many times as needed to pass. The public quiz found on the website is a fun way to learn and test yourself on your knowledge of Mississippi frog calls. Training sessions can be scheduled throughout the state to help volunteers learn the frogs and protocols for the routes.

For more information about MAMP or volunteering, contact Kathy Shelton at the Mississippi Department of Wildlife, Fisheries and Parks District 6 office in Wiggins at 601-928-3720.

Florida Harvester Ant Surveys: June 2007-present

by Tom Mann, MMNS Zoologist

ntil 2006, when botanist Lucas Majure found Florida Harvester Ants (*Pogonomyrmex* badius) in a Smith County cactus patch, the species hadn't been documented on the mainland of Mississippi since the 1930s, and was thought to have been eliminated by fire ants and/or the statewide spraying of mirex intended to control them. These relatively large, reddish ants have two distinctive features facilitating identification: some workers have spectacularly enlarged heads (used for cracking seeds); and their low, broad beds (up to 65 inches across) are almost always decorated with a



Florida Harvester Ant Beds (Pogonomyrmex badius)



as far north as Lowndes County, and have mapped an additional 28 populations in ten counties. Most sites are badly degraded (overgrown, underburned). Harvester Ants' habitat requirements (open, unshaded

areas in deep sand with a good herbaceous layer) and threats (dense pine plantings, fire suppression, fire ants, cogon grass invasion, and development) are the same as those of gopher tortoises.

Voucher specimens are collected at each site for the Museum. Duplicate vouchers are deposited at the Mississippi State University Entomological Museum. Samples from three sites were sent to Dr. Robert Johnson at Arizona State University for inclusion in an updated range map for this species. If you have seen these ants, please contact the Mississippi Museum of Natural Science at 601-354-7303.

CALENDAR

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 10_{AM}. and Sunday at 2pm.

Creature Features

Scheduled or spontaneous, these informal programs feature live or mounted animals. Scheduled every Saturday at 10_{AM} and 2_{PM}. 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 10% discount at The Dragonfly Shoppe.



FEB 13 - MAY 13. 2010 · SPECIAL EXHIBIT Smokey Bear & Woodsy Owl: Home Sweet Home

Two beloved American icons come to life in this educational, interactive exhibit for children.

FEB 20 · SAT

Growing UP WILD at MMNS For details, contact Angel Rohnke. 601-354-7303 angel.rohnke@mmns.state.ms.us



MAR 2 \cdot TUE \cdot 12NOON-1PM \cdot LECTURE Wildlife Conservation in Australia: a 30 Year Perspective SPEAKER: Dr. James ("Skip") Lazell President The Conservation Agency

Dr. Lazell will discuss his findings related to his thirty year study of the distributions of unique, endemic species in Australia and their population status and densities. Despite declines and population losses, much of Australia's unique fauna remains abundant and awareness of it and efforts to conserve it are popular and strong.

MAR 6 \cdot SAT \cdot 10am-3pm \cdot event **Fossil Road Show**

Fossil experts will help visitors identify their fossils and determine more about their own fossil collections.

MAR 15 · MON Jr. Duck Stamp Competition

Deadline for entries. Call for more details.

MAR 16-19 · TUE-FRI · WORKSHOP **Teacher Workshops**

For details, contact Angel Rohnke or Rebecca Jones. 601-354-7303 angel.rohnke@mmns.state.ms.us rebecca.jones@mmns.state.ms.us

APR 4 · SUN · EASTER **Museum Closed**



APR 6 · TUE · 12NOON-1PM · LECTURE Singing about Longleaf SPEAKERS: "The Blues Rangers": Tate Thriffiley, Ecologist; Dave Allen, Wildlife Biologist; Jimmy Mordica, Silviculturalist, USDA Forest Service, De Soto National Forest,

The Blues Rangers are a team of biologists from Mississippi's De Soto National Forest, who sing their original blues songs highlighting forest management issues. In 2005, they performed at the Smithsonian Folklife Festival and in 2008, were named Mississippi Wildlife Federation's Conservation Educators of the Year.



APR 10 \cdot SAT \cdot 10am-4pm \cdot event **NatureFEST!**

Bring the family to celebrate the Museum's 10th Anniversary – starring bats, snakes, birds of prey, and fish - and a behind-the-scenes look at research, guided nature walks, and other outdoor activities. (See page 4 for details.)

APR 22 · THU · 5PM-7PM **MMNS Foundation Spring Member Night**

RSVP to Rebecca Jones. 601-354-7303 rebecca.jones@mmns.state.ms.us

MAY 1 \cdot SAT \cdot 10am-3pm \cdot 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 4 \cdot TUE \cdot 12NOON-1PM \cdot LECTURE On the Brink in Mississippi SPEAKER: Scott G. Hereford Supervisory Wildlife Biologist, Mississipp Sandhill Crane National Wildlife Refuge, Gautie Our endangered Mississippi Sandhill Cranes are one of

Reserved Group Access

Children will discover that there are many

crocodiles, snakes, dinosaurs, etc.-and

will note their unique characteristics

kinds of reptiles - turtles, alligators, lizards,

FEBRUARY CLASSES

"What's Not to Like!"

(fun study of reptiles)

and behaviors.

the rarest bird populations in North America. Scott Hereford will discuss efforts to save this fascinating part of our state's wildlife heritage. This Refuge was the first one established under the Endangered Species Act and protects the unique, speciesrich wet pine savanna which is home to our Mississippi Sandhill Crane population.

MAY 31 · MON · MEMORIAL DAY **Museum Closed**

JUN 1 \cdot TUE \cdot 10am-3am \cdot 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 1 · 10AM-11AM & 12NOON-1PM · LECTURES **Snake Day Lectures: De-mystifying MS Snakes** SPEAKER: Bryan Fedrick MMNS Aquatic Biologist

601.354.7303

Call

for information. reservations & resources.

MARCH, APRIL & MAY CLASSES **So!**" (investigate forest friends) Children will discover that many of their favorite animals live in a special habitat

called a "forest".

Call Joan Elder for reservations (601-354-7303 ext. 136).



Visitor Access

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

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

STORY TIME (AGES 3 TO 5) WED 1:15. 2:15. & 3:15 PM (AUG-MAY) TUE AND THU 10:15 & 11:15AM (JUN-JUL)

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

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



Learn the value of our native snakes and how to distinguish six venomous species from fifty-five non-venomous ones found here.

MEGALODON

JUN 5, 2010-JAN 9, 2011 · SPECIAL EXHIBIT Megalodon:

Largest Shark that Ever Lived The 60-foot, 2-million-yearold Megalodon looms life-size in this mega-exhibit of modern and fossil sharks.

JUN 5 · SAT · 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 12 · SAT · WORKSHOP Project WET Workshop

For details, contact Rebecca Jones. 601-354-7303 rebecca.jones@mmns.state.ms.us.

JUN & JUL **Fun Fridavs** Fun Fridays are interactive, hands-on programs offered every Friday in June and July from 10AM to 12NOON. Program topics coordinate with the Megalodon: Largest *Shark that Ever Lived* exhibit opening at the Museum on June 5, 2010. An adult must accompany children.



JUN & JUL WILD about Summer Camp

Camp WILD (for the younger campers) is a place where kids explore the outdoors, make new friends, and delve into nature. For details, contact Nicole Smith. 601-354-7303 nicole.smith@mmns.state.ms.us

JUN & JUL Jr. Naturalist/Advanced Summer Camp

Jr. Naturalist Camp and Advanced Camp (for the older kids), gives kids a chance to participate in indoor/outdoor activities that focus on the ecosystems of Mississippi. Campers learn about identification, collection, and conservation of our indigenous species. For details, contact Nicole Smith. 601-354-7303 nicole.smith@mmns.state.ms.us

JUL 4 · SUN · INDEPENDENCE DAY Museum Closed

JUL 6 · TUE · 12NOON-1PM · LECTURE Modern & Fossil Sharks–Was **Megalodon** in Mississippi? SPEAKER: George Phillips

Museum Paleontology Curator, Mississippi Museum of Natural Science, Jackson You may have seen the movie "Jaws" – but vou've never seen jaws like these. They belonged to a behemoth 60 feet long, whose giant mouth bristled with 276 teeth. It was the Megalodon, the biggest prehistoric shark of all times that ruled the seas more than two million years ago. Phillips will introduce us to the exhibit and talk about the oldest shark remains from Mississippi.

JUL 27-30 · TUE-FRI · WORKSHOP **Teacher Workshops**

For details, contact Angel Rohnke or Rebecca Jones. 601-354-7303 angel.rohnke@mmns.state.ms.us rebecca.jones@mmns.state.ms.us

Note: Dates subject to change.

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

"Live in the Ocean? I Don't Think

JUNE CLASSES "Was | Big or What?" (a close look at Megalodon. the largest shark to have ever lived.) Children will discover that many animals are "extinct" - no longer exist.



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**

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

Teacher Workshops

MAR 16 - WILD about Art MAR 17 - Aquatic WILD MAR 18 - Project WET MAR 19 - Flying WILD JUN 12 - Project WET JUL 27 - WILD about Reptiles JUL 28 - Aquatic WILD JUL 29 - Flying WILD JUL 30 - Project WET

Teacher Resources

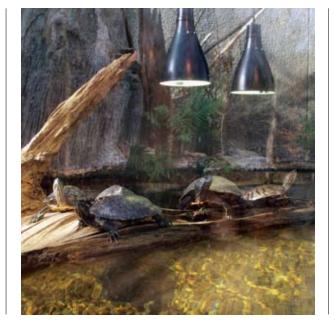
To schedule a workshop or field trip, reserve a resource kit, download classroom materials. or learn more about how our Museum can help meet your classroom needs. call 601-354-7303 or visit www.msnaturalscience.org.

Basking in the Terrarium's New Light

by Karen Dierolf, MMNS Aquatic Biologist

The start of 2010 is also the start of a completely renovated terrarium at the Museum!

n November 2009, the terrarium was drained and all the animals were moved to holding tanks behind the scenes. All of the gravel and filter plates at the bottom of the terrarium were removed to allow workers from Adam Evans Waterproofing to grind off the old liner and reapply liner to stop leaks which had developed along the windows of the terrarium. All the old planting pots were also removed to allow a frosted film to be applied to the lower windows to help with appearances and to lessen the amount of light coming into the terrarium.



A large ultra violet sterilizer will be added behind the scenes to improve water quality, prevent diseases and hopefully reduce the amount of algae growing in the terrarium. New lighting fixtures with special light bulbs were also hung from the roof directly over large logs. These special lights will help improve basking areas and help the overall health of the turtles and alligators.

Visitors have been delighted with how close they can get to the turtles and alligators. If you move slowly enough you can be eyeball to eyeball with one of these reptiles. More changes are happening as well. An irrigation system is being installed to help water the plants. In the spring, more native plants will be added to the terrarium both in the water and on the land. Be sure to check out this old, but new, exhibit and all its improvements during your next visit to the Mississippi Museum of Natural Science.

Rare Fossil Donation

by George Phillips, MMNS Paleontology Curator



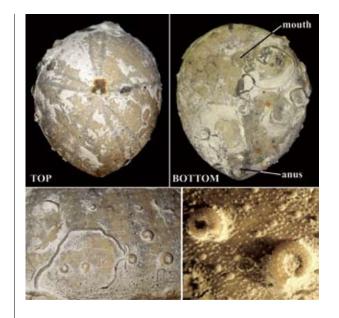
Fossil donor Zachary Acker (center) of DeQueen, Arkansas, and his parents. Charles and Teresa, pose with Museum Director Libby Hartfield (far right).

achary Acker of DeQueen, Arkansas, recently donated a rare fossil sea urchin [Echinocorys] to the Museum from a 74 million-year-old chalk quarry near Foreman, Arkansas.

Museum paleontologist, George Phillips, welcomed the donation as it comes from a geologic formation and locality on which he has been doing research, comparing fossils and chalk beds in southwestern Arkansas with those in northeastern Mississippi.

After the echinoid died, the surface was colonized by a half dozen different types of encrusting organisms, including oysters, bryozoans, and polychaetes (bristle worms).

The polychaetes are of two types, the first forming long, narrow, sinuous tubes [Glomerula] and the second forming short, stout coiled, and tuberculated (pimply) tubes [Neomicrorbis].



waterworks boundary.

weedy vegetation.

Mother Nature also planted the right of way with seeds blown in from cottonwood trees, winged elm, willow and maple, among others. These tree species have light seeds that either float on the wind (cottonwood, sycamore, willow), or helicopter to the ground while being pushed by the wind (ash, maple). These methods of seed dispersal are perfect for river floodplains like ours where these trees are found. Rivers annually send high water over their banks, shift their sandbars, and leave lots of newly deposited bare silt and sand behind receding waters. This is the perfect place for light, wind-borne seeds to disperse, settle and start new growth quickly. It makes no difference to the blowing seeds whether the bare soil is created by river flows or, in our case, by a bulldozer Along the right of way, a dense growth of composite herbs (sunflower family) flowered spectacularly in autumn, supporting high populations of wild bees and butterflies. It is extremely productive of seeds that attracted seed-eating birds and, in turn, the hawks which hunt them. There will be much plant and wildlife activity to observe in this recovering area for some

time to come.

Museum Trail Swamp Vegetation Improving

by Andrew Whitehurst, MMNS Scenic Streams/Natural Areas Coordinator

ur swamp vegetation is recovering a year after the construction of a section of Jackson's new water line. The installation last year of new pipe on an existing right of way in the lower swamp cleared a 200 foot wide swath across the park from Lakeland Drive to our boundary with Jackson's water works. At completion of the project in April, the contractors provided us with a service road on top of the buried pipeline, a footbridge for the red trail, straw mulch on the bare soils, and a new fence at the

Things look much better after one season of growth. Last winter, Museum volunteers and staff planted 600 willow oak, water oak, green ash, bald cypress and cherrybark oak trees. We also planted several hundred acorns picked up under nearby trees along the bluff. Foresters advise that seedlings won't be seen for about three years after planting, when they grow tall enough to rise above the annual





April 2008

December 200



Museum Staff and Volunteers plant a variety of trees and acorns along the bluff at the water pipeline work site.

\$100.000-\$200.000

Abe Rotwein Family The Chisholm Foundation Regions Bank Deposit Guaranty/AmSouth Foundation Ergon 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 Goldmar Gannett Foundation/The Clarion-Ledger Gertrude C. Ford Foundation Phil Hardin Foundation Mr. & Mrs. Dudley Hughes Irby Companies Richard McRae, Jr., Family Mississippi Chemical Corporation Mississippi Farm Bureau Federation National Fish and Wildlife Foundation/Shell Marine Habitat Program 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.

Smokey Bear & Woodsy Owl: **Home Sweet Home** MS Dept. of Wildlife, Fisheries & Parks MMNS Foundation AT&T USDA Forest Service Anonymous Feild Cooperative Associates, Inc.

Molpus Woodlands Group Paul T. Benton Plum Creek Sanderson Farms, Inc. The Chisholm Foundation Trustmark National Bank Dr. & Mrs. Steve Zachow Family of Catchings B. Smith

\$25.000-\$50.000

Blue Cross & Blue Shield of Mississippi Bureau of Land Management Delta and Pine Land Company Feild Cooperative Association, Inc. Foundation for the Mid South Georgia-Pacific Corporation **International Paper Foundation** Jackson Convention & Visitors Bureau Merrill Lynch MS Department of Environmental Quality Mississippi Power Company Mississippi Valley Gas Company Molpus Woodlands Group Paul T. Benton Plum Creek Foundation Pruet Companies Sanderson Farms **Trustmark National Bank** U.S. Department of Transportation U.S. Forest Service Mr. & Mrs. William J. Van Devender Walker Foundation Dr. & Mrs. Julian Wiener Weyerhaeuser Company Foundation Yazoo Mississippi Delta Levee Board

\$10.000-\$25.000

The Armstrong Foundation AT&T **BancorpSouth Foundation** Betsy & Wade Creekmore **Cellular South Foundation** Howard Industries, Inc. Mississippi Arts Commission Mississippi Forestry Association Mississippi Forestry Foundation National Geographic Society Education Foundation Nissan of North America, Inc. Soterra LLC Sprint PCS/US Unwired St. Dominic Health Services The Straddlefork Foundation Wild Turkey Federation



Volunteers Making Milestones

by Ann Peden, Volunteer Services

Several volunteers have reached big milestones of service in the fall of 2009. and the reach of their gifts of talent and time is extensive.

olunteers John Davis and Joy Rushing have each given over 3,000 hours of service to date at the Museum alone, contributing to our scientific collections, assisting in our research library, participating in on-going research work, and excelling in public education. As former classroom teachers, John and Joy are able to generate a lasting inspiration in others that delights staff and visitors alike.

They are not just helping Mississippians discover and protect the wonders of our state through their Museum work. John has worked extensively with the Jackson Audubon Society promoting backyard bird awareness and conservation, and Joy has served in countless leadership roles for the Mississippi Gem and Mineral Society and the Clinton Nature Center.

Martha Bercaw and Clyde Hare have given

over 500 hours sharing the wonders of natural science with visitors in our exhibit hall and supporting our public events. Bill Hays has given over 500 hours faithfully and warmly greeting visitors as they enter our doors. In just one year

and about 400 hours of



volunteer service, Jim Leonard has contributed to the Museum collections. Jim has created approximately 4,000 herbarium specimens eliminating a backlog of plant specimens acquired over time, and also is working on the Fannye Cooke archival collection. This is a collection of only Museum founder Fannye Cooke's specimens, dating from 1925-1927. Because of the age of the specimens and the need to preserve her hand-written annotations, this is tedious, careful work in transfer to acid-free paper for preservation.

Mary Wolfe has contributed over 300 hours assisting with our gift shop, public events and a multitude of other tasks.

To talk about how you can join in supporting the Museum's mission through our volunteer program, contact Ann Peden. 601-354-7303 ann.peden@mmns.state.ms

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