

MISSISSIPPI
Museum of
Natural
Science

the world of
GIANT
insects

June 17 - September 10, 2006

Imagine insects that are bigger than big—they're huge, and they move!

These fascinating creatures will be at the Mississippi Museum of Natural Science in Jackson from Saturday, June 17 through Sunday, September 10, 2006.

The World of Giant Insects exhibit will transport visitors to another world where bugs tower over people. Five hugely magnified robotic insects will allow visitors



to more clearly observe some of the behaviors and adaptations that have enabled these creatures to thrive.

Each insect has between five and 20 moving parts, with movement achieved by hydraulics or electric motors. A 19-foot-long praying mantis shows threatening behavior, causing its prey to freeze, to avoid being eaten. A 13-foot-long locust spreads its wings.



Two 11-foot-long rhinoceros beetles fight, each the size of a Volkswagen...um...beetle. A giant walking stick, over 21 feet long, displays its protective camouflage. And at 15 feet, a swallowtail butterfly caterpillar is the biggest wiggler you'll ever see.

Also on display are three giant insect heads with mouthpieces the visitor can operate by pushing a button. See how a dragonfly magnified 80 times chews, and how a bee, 200 times life size, sucks nectar. Marvel at how a mosquito, 600 times its real size, draws its meals through its piercing mouthpieces. In addition to these giant creatures, there will be a number of live insects on display.

These giant robotic insects are from Kokoro, the company responsible for the Museum's fall 2005 exhibit of robotic, ice-age mammals. This time, on exhibit are animals still living on earth that far outnumber humans.



UPCOMING EVENTS

**Jewels of the Sea:
Walter Anderson's Sea Life**

Watercolors, block prints, drawings, and live animals
OCT 5, 2006 - JAN 28, 2007



Marsh Mission

Photography by C.C. Lockwood
FEB 15 - MAY 27, 2007



ANNOUNCEMENT

**Jr. Duck Stamp
State Winner**

Hannah Loy, Cathedral High School, Natchez, MS is Mississippi's BEST of SHOW

Jr. Duck Stamp art winner.



Her Blue-winged Teal acrylic painting will compete in the National Junior Duck Stamp Competition. Andree Gamberi is Loy's art teacher.

The Natural Newsline is sponsored in part by the Jackson Convention and Visitors Bureau

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SPRING/SUMMER 2006

MISSISSIPPI Museum of Natural Science

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WILDLIFE, FISHERIES AND PARKS

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BLACK BEAR BIOLOGIST



Libby Hartfield

Libby Hartfield
MUSEUM DIRECTOR

At the recent Governor's Conference on Tourism, the Mississippi Tourism Association presented our museum with the award for Travel Attraction of the Year. I am very proud of this prestigious award, and I want to thank our dedicated Museum staff for the excellent service they have provided to our visitors, both Mississippians and out of state tourists. For more information about the award, see the sidebar article on this page.

I would also like to thank Waste Management Inc., and the National Science Museum, Tokyo, for making our new fossil whale exhibit possible, and Ernest A. Klatt, Jr., for his lead gift of \$10,000 towards construction of a \$30,000 exhibit to compliment the skeleton. To learn more about this exciting new display, please see page 4.

We hope you are enjoying the new *Newsline* format and we welcome your comments and suggestions. Looking forward to seeing you in the Museum.



New to our staff is Matt Hicks, our Natural Heritage Program Coordinator. With a B.S. degree in biology from Mississippi College and an M.S. degree in biology from the University of Alabama, Matt has worked extensively in the conservation field in Mississippi, Florida, and Alabama and has particular expertise in aquatic ecology. He brings a wealth of experience gained from his past employment with the Mississippi Department of Environmental Quality, The Nature Conservancy, and environmental consulting with a private firm.



Melanie Caudill is the Museum's new data manager for the Natural Heritage Program, administering the program's database of rare, threatened, and endangered species. Completing her M.S. in Oceanography and Coastal Sciences at Louisiana State University before coming to us, Melanie's research involved fish and crustacean use of salt marsh and black mangrove habitats. She earned her B.S. in Wildlife Ecology and Conservation at the University of Florida while working for Florida Lakewatch, a water-monitoring program. She was also on a team that inventoried amphibians throughout Everglades National Park and the U.S. Virgin Islands and monitored alligator activities across south Florida.



Isabel Kelly has joined the Museum staff as an educator in the pre-K Discovery Room and early elementary education. She grew up in Jackson, graduated from Millsaps with a B.A. in Elementary Education, and taught for 25 years in grades 1-6, retiring in 2001. She taught in the Jackson Public Schools, Jackson County Public Schools, and Edenton-Chowan Public Schools in North Carolina. After retiring, she served for 3 years on the staff of the Earth Lab and at the environmental learning center at the Episcopal Camp and Conference Center in Madison County, Mississippi.

AWARDS

Mississippi Tourism Association MISSISSIPPI TRAVEL ATTRACTION OF THE YEAR

The Mississippi Tourism Association presented the Museum with their coveted "Travel Attraction of the Year Award" at the annual Governor's Conference on Tourism recently. The well attended awards program recognized outstanding contributions to the advancement of Mississippi tourism.

Anne Coggins, President of the Mississippi Tourism Association, praised the Museum for having "hosted visitors from all Mississippi counties, all 50 states and over 35 foreign countries. The Museum reached over 236,000 people through site visits, public programs and outreach and community service in 2005 while volunteers contributed more than 6,450 hours of their time. The Jackson, Mississippi attraction also conducts research, presents exhibits, maintains a research library and publishes numerous articles related to Mississippi's natural environment."



Craig Ray, MDA Director
Libby Hartfield, MMNS Director
Anne Coggins, MTA President

MISSISSIPPI MUSEUM OF NATURAL SCIENCE · 2148 RIVERSIDE DRIVE · JACKSON, MS 39202-1353 · 601.354.7303 · WWW.MDWFP.COM/MUSEUM

QUICK CALENDAR


Katfishin' Kids
SAT · JUNE 3
8:30AM to 11:00AM


Snake Day: Mississippi Style
TUES · JUNE 6
10:00AM to 11:00AM
NOON to 1:00PM


Fun Fridays
10:00AM to NOON



Katfishin' Kids

Bring the kids and join us for a fun-filled day where children can learn the basics of fishing.

The Mississippi Wildlife Federation, the Mississippi Museum of Natural Science, the Mississippi Department of Wildlife, Fisheries and Parks, and all local Wal-Mart stores are working together to bring this free event to children ages 5-14 to teach them all about fishing. They will learn what a fish is and become familiar



with its habitat. We'll stock the pond with catfish, bass and bream and let them try their hand at fishing. Parents are invited. All equipment is provided. This event is free to all, so load up and join us on June 3rd for our annual Katfishin' Kids! For more information call 601-354-7303. Mark your calendars: June 3rd from 8:30 - 11:00AM at Turcotte Lab off Hwy 43 at the Ross Barnett Reservoir.

Fun Fridays

Hands-on activities for everyone.

Family Fun Fridays are interactive, hands-on programs offered every Friday in June and July from 10:00AM to NOON. Program topics coordinate with The World of Giant Insects exhibit opening at the Museum on June 17th. An adult must accompany children.

June 2	Things with Wings
June 9	The BEETLES
June 16	Ins & Outs of Insects
June 23	Amazing Insect Mouths
June 30	Insects Incognito
July 7	A Monarch Miracle
July 14	Creepy Crawlers
July 21	Bugtastic Bugs
July 28	Bug Buffet

Snake Day: Mississippi Style

Learn how to tell the difference between venomous and nonvenomous snakes.

Biologist Terry Majure will de-mystify our much-maligned native reptiles - SNAKES! Learn the characteristics that will help you recognize the differences between the 6 venomous and 55 non-venomous snakes found in Mississippi. Majure will provide the public with accurate natural history information on our native snakes and their valuable place in the ecosystem.

Live Mississippi snakes will be on exhibit with experts available to answer your questions. Due to popular demand, two snake lectures are scheduled on June 6th, from 10:00 to 11:00AM and NOON to 1:00PM.



There will also be live displays of venomous and nonvenomous snakes from 10:00AM until 3:00PM.

SPEAKER: Terry Majure, Aquarium Coordinator, Museum of Natural Science, Jackson
SNAKE EXHIBIT provided by Terry Vandeventer, Living Reptile Museum, Terry, MS



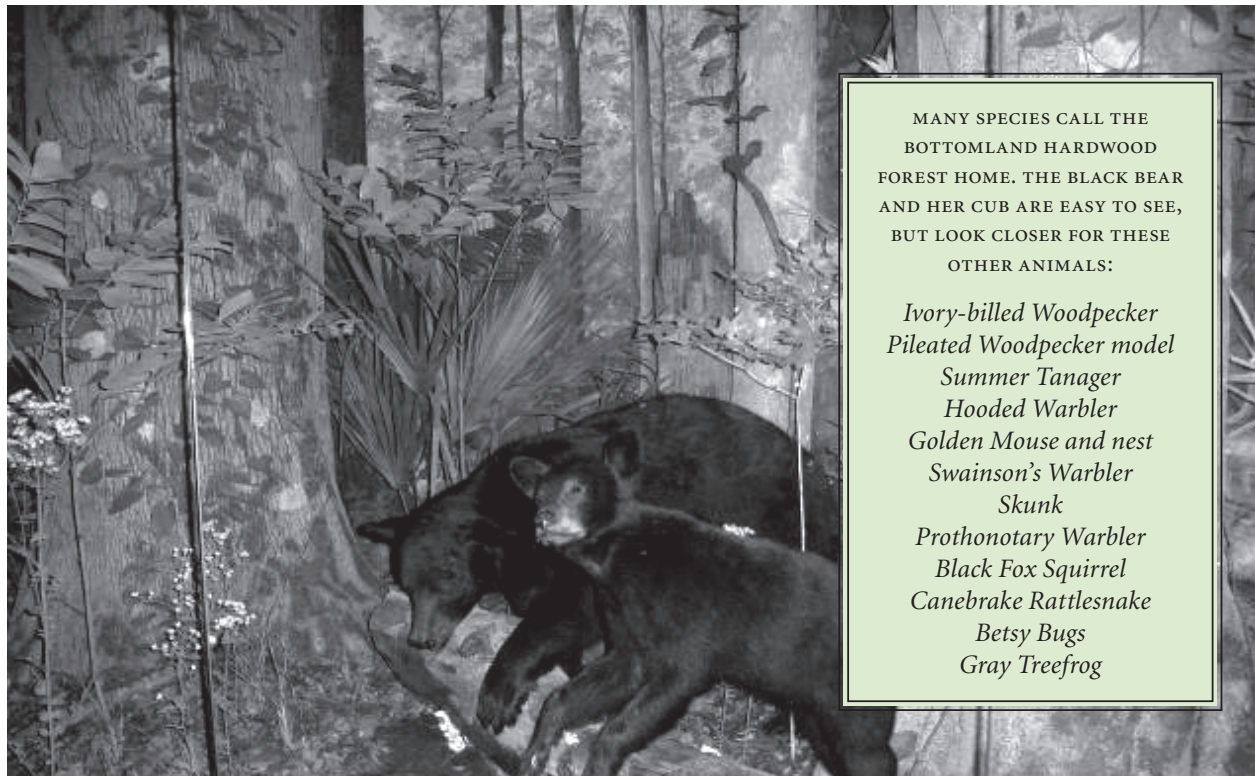
Journey Into the Past: Bottomland Hardwood Forest

Occupying one of the two largest spaces in the Museum's permanent exhibit hall, the Bottomland Hardwood Forest Exhibit is our only display that depicts the environment not as it is today, but as it was in the 1890's – specifically, in an area called Hooker's Ridge. During the 1890's, this lush environment provided homes for a great variety of species including the nearly extinct Ivory-billed Woodpecker and the endangered Black Bear.

During the past century, more than 16 million acres of bottomland forest were lost due to agriculture, logging, and development. Now less than five million acres remain. The loss of this critical environment is measured in more than destroyed woods; also disappearing are important water quality functions. When rivers flowed beyond their channels, their floodwaters pooled in bottomland forests that slowed swirling currents until the heavier silt dropped out. The water would then recede into the river, clean and free of soil.

"...he stood against a big gum tree beside a little bayou whose black still water crept without motion out of a cane-break, across a small clearing and into the cane again, where invisible, a bird, the big woodpecker...clattered at a dead trunk... and he knew that the bear was looking at him."

WILLIAM FAULKNER,
Go Down Moses



MANY SPECIES CALL THE BOTTOMLAND HARDWOOD FOREST HOME. THE BLACK BEAR AND HER CUB ARE EASY TO SEE, BUT LOOK CLOSER FOR THESE OTHER ANIMALS:

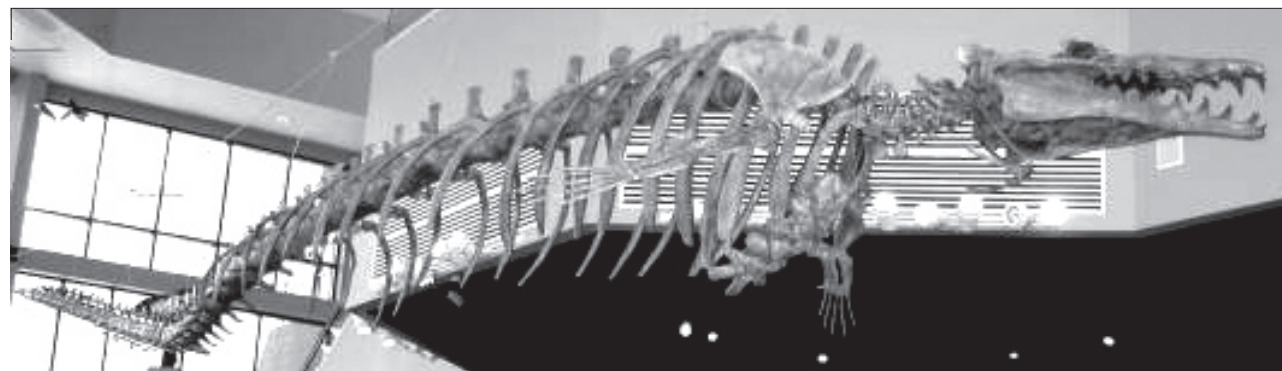
- Ivory-billed Woodpecker*
- Pileated Woodpecker model*
- Summer Tanager*
- Hooded Warbler*
- Golden Mouse and nest*
- Swainson's Warbler*
- Skunk*
- Prothonotary Warbler*
- Black Fox Squirrel*
- Canebrake Rattlesnake*
- Betsy Bugs*
- Gray Treefrog*

Losing bottomland forests means rivers now carry more silt, which suffocates mussel beds and fish eggs. Today, quick-moving floods bypass oxbows and swamps, flushing important nutrients downstream too quickly for plants and animals to use.

All animals, from the small Gray Treefrogs to Black Bears, lose when habitat disappears. Thirty-

seven species of animals are currently listed in Mississippi's Comprehensive Wildlife Conservation Strategy as species in need of conservation because of a loss of habitat in bottomland hardwood forests.

This exhibit serves to remind visitors of the importance of good stewardship of our natural environment.



These ancient whales are only found in a few places in the entire world.

If you have not visited the Museum recently then perhaps you are unaware of the spectacular new fossil whale hanging in the lower lobby. In 2002, a 35-million year old Basilosaurus skeleton was found in Scott County. All 62 feet of this incredible permanent exhibit is now on display thanks to Waste Management, Inc. and the National Science Museum, Tokyo. We have received a lead gift of \$10,000 from Ernest A. Klatt, Jr. towards construction of a \$30,000 exhibit to complement the skeleton and explain these fascinating creatures from our past.

Cornerstone of Knowledge

Though unseen by most visitors to the Mississippi Museum of Natural Science, the biological research collections provide the foundation upon which much of our knowledge of animals, plants, and fossils is based. This is the second in a series of articles highlighting these collections.

MMNS Invertebrate Collections

FRESHWATER MOLLUSKS

The MMNS mollusk collection is currently composed of 46,444 specimens of freshwater mussels and snails representing 200 species and subspecies. Mollusks have been part of the Museum's collections since the Works Progress Administration (WPA) era of the late 1930's and early 1940's. The oldest were collected in 1936, but no other specimens were added until the 1960's. The growth of the collection has been relatively steady since that time. The specimens in the mollusk collection have come from 16 states, but the majority are from Mississippi and represent all counties except Calhoun.

Most specimens in the mollusk collection are dried shells, although we do have whole specimens stored in ethyl alcohol. Specimens in alcohol are useful for studies of soft body parts, investigations of reproductive season, and genetic studies.



Freshwater mussels: the Museum has over 46,000 in its collection!

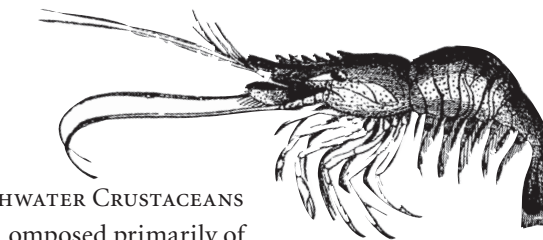
FRESHWATER CRUSTACEANS

Composed primarily of crawfish and freshwater shrimp, the crustacean collection presently contains 8,229 specimens stored in alcohol and includes 104 species and subspecies. Crustaceans have been part of the Museum's collection since the WPA era but most have been added since the 1970's. Our entire crustacean collection was identified to the species level in the 1990's by the late Dr. Joseph Fitzpatrick. Several hundred more recently collected specimens have yet to be identified.

There are specimens from 11 states in the collection, but most are from Mississippi. We have specimens from 75 of Mississippi's 82 counties.

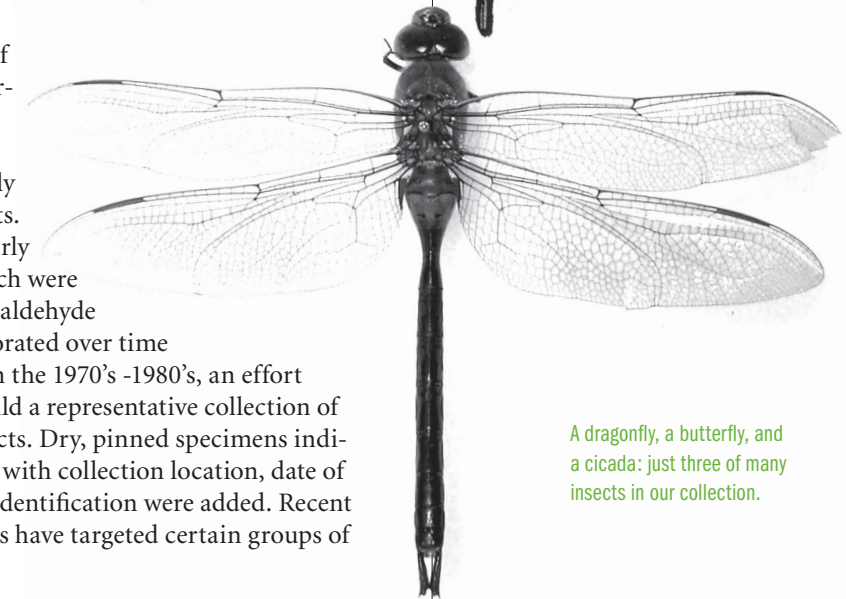
OTHER INVERTEBRATES (INSECTS, SPIDERS AND SCORPIONS)

Collection of other invertebrates in the 1930's was limited primarily to aquatic insects. Most of these early collections, which were stored in a formaldehyde solution, deteriorated over time and were lost. In the 1970's -1980's, an effort was made to build a representative collection of Mississippi insects. Dry, pinned specimens individually labeled with collection location, date of collection, and identification were added. Recent collecting efforts have targeted certain groups of



insects including underwing moths, tiger beetles, and cicadas.

We have a small number of spiders, including specimens of the brown recluse and black widow. The only scorpion native to Mississippi (*Vaejovis carolinianus*) is also in the collection along with several non-native scorpions. Recent collections indicate that two non-native scorpion species may have established populations in our state.



A dragonfly, a butterfly, and a cicada: just three of many insects in our collection.

ONGOING

First Tuesdays

Naturalist Lecture Series
On the first Tuesday of each month, the Museum offers lectures addressing a variety of natural science subjects. Unless noted otherwise, the lectures take place from NOON to 1:00 PM in the Museum's Rotwein Theater.

Lectures are free to Museum Foundation members. Please show your membership card at the gate. Regular Museum fee: \$5.00 for adults; \$4.00 for senior citizens; \$3.00 for children; \$2.00 for students with teachers. Members also receive a ten percent discount at The Dragonfly Shoppe.

Creature Features

These informal programs—scheduled or spontaneous—feature live or mounted animals. Scheduled almost every Saturday at 10:00 AM and 2:00 PM, Creature Features make learning fun!

Fish Feeding

Come meet some of our most fascinating aquarium inhabitants, every Tuesday and Friday at 10:00 AM, and Sunday at 2:00 PM.

Come On Outside!

Visit the Museum's Native Plant Garden and nature trails to experience the magnificence of summer 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!

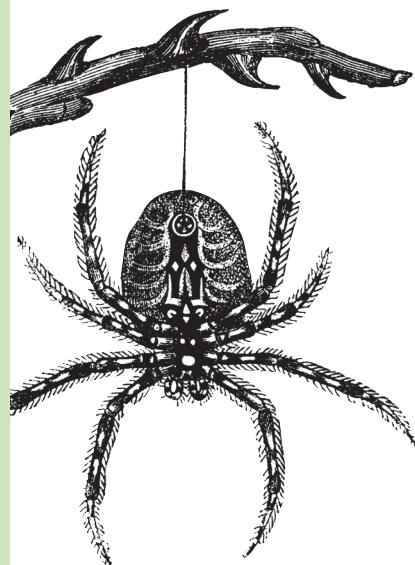
JUNE 2 · FRI · 10AM-NOON
Fun Friday
Things with Wings



JUNE 3 · SAT · 8:30AM-11AM
Katfishin' Kids

Come have fun at the Turcotte Lab off Hwy 43 at the Ross Barnett Reservoir. A free event for children ages 5 – 14 to teach them all about fishing. Parents are invited, and all equipment is provided. For more information call 601-354-7303.

JUNE 3 · SAT · 10AM & 2PM
Creature Feature



TEACHERS:

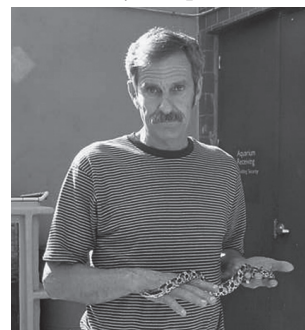
to schedule a workshop or field trip,
to reserve a resource kit,
to learn more about how our Museum
can help meet your classroom needs,

call 601.354.7303



JUNE 6 · TUE · 10AM-3PM · EVENT
Snake Day

Live Mississippi snakes on exhibit with experts available to answer your questions.



10AM-11AM & NOON-1PM · LECTURES
SPEAKER: Terry Majure
Aquarium Coordinator, Museum of Natural Science, Jackson

Learn the characteristics that will help you recognize the differences between the 6 venomous and 55 non-venomous snakes in Mississippi. Majure will provide the public with accurate natural history information on our native snakes and their valuable place in the ecosystem.

JUNE 9 · FRI · 10AM-NOON
Fun Friday
The BEETLES

JUNE 10 · SAT · 10AM & 2PM
Creature Feature



JUNE 10 · SAT · 9AM-3:30PM · \$10
Project WILD
Teacher Workshop

Teachers earn CEU credits. See below for details.

JUNE 16 · FRI · 10AM-NOON
Fun Friday
Ins & Outs of Insects



JUNE 17 · SAT · EXHIBIT PREMIERE
The World of Giant Insects

JUNE 17 · SAT · 10AM & 2PM
Creature Feature

JUNE 23 · FRI · 10AM-NOON
Fun Friday
Amazing Insect Mouths

JUNE 24 · SAT · 10AM & 2PM
Creature Feature

JUNE 24 · SAT · 9AM-3:30PM · \$10
Project WET
Teacher Workshop

Teachers earn CEU credits. See below for details.

JUNE 30 · FRI · 10AM-NOON
Fun Friday
Insects Incognito

JULY 7 · FRI · 10AM - NOON
Fun Friday
A Monarch Miracle

JULY 8 · SAT · 10AM & 2PM
Creature Feature



JULY 14 · FRI · 10AM-NOON
Fun Friday
Creepy Crawlers

JULY 15 · SAT · 10AM & 2PM
Creature Feature

Teachers Back to School Night

September 14, 2006
4 to 7 PM
Great Resources!



JULY 18 · TUE · 9AM-3:30PM · \$10
Project WET
Teacher Workshop

Teachers earn CEU credits. See below for details.

JULY 19 · MON · 9AM-3:30PM · \$10
Project WILD
Teacher Workshop

Teachers earn CEU credits. See below for details.

JULY 21 · FRI · 10AM-NOON
Fun Friday
Bugtastic Bugs

JULY 22 · SAT · 10AM & 2PM
Creature Feature

JULY 28 · FRI · 10AM-NOON
Fun Friday
Bug Buffet

JULY 29 · SAT · 10AM & 2PM
Creature Feature



Call 601.354.7303
for information,
reservations
& resources

Preschool Classes

MAY CLASSES

Do I Look Like My Mama?

Some baby animals look just like their parents. Others don't even look like the same species. Come learn about the fascinating life cycles of birds, frogs, and butterflies.

JUNE/JULY/AUG CLASSES

Want Variety? Check Us Out!

Children will examine an insect and note its characteristics. They will also learn that there are more insects in the world than all other animals combined.

SEPTEMBER CLASSES

Owls, Silent Hunters of the Night

Children will discover that some birds prefer meat; these birds are called raptors. They will note the characteristics of one raptor that hunts at night – the owl.



AUG 1 · TUE · NOON-1PM · LECTURE
Giant View of Micro-moths

SPEAKER: Dr. Richard L. Brown
Professor of Entomology & Director, Mississippi Entomological Museum, Mississippi State University

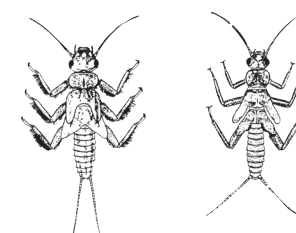
Moths wings span all sizes, from more than one foot to less than 3 millimeters. Microlepidoptera—our smallest moth species—have an array of colors and forms surpassing those of butterflies. Dr. Brown will present the remarkable habits and structures of micro-moths through images at magnifications 5 to 30,000 times their natural size.

AUG 5 · SAT · 10AM & 2PM
Creature Feature

AUG 12 · SAT · 10AM & 2PM
Creature Feature

AUG 19 · SAT · 10AM & 2PM
Creature Feature

AUG 26 · SAT · 10AM & 2PM
Creature Feature



SEPT 5 · TUE · NOON-1PM · LECTURE
American Stoneflies: Biology and Systematics

SPEAKER: Dr. Bill Stark
Sadler Professor of Biology at Mississippi College in Clinton

North America is home to approximately 650 species of stoneflies (Order Plecoptera) including some with body lengths greater than 3 inches and others less than a half inch. These aquatic insects, associated with relatively

Preschool Summer Camps

JUNE/JULY CAMPS
Bugs, Bears, and Bats

9:30AM (Age 2)
10:45AM (Ages 3 to 5)

Children will learn that although the names of animals may begin with the same letter, the animals themselves can be very different.

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.

Camp Session I

June 5 (bugs), June 12 (bears), June 19 (bats)

Camp Session II (repeat)

June 26 (bugs), July 3 (bears), July 10 (bats)



pristine streams, are among the most prolific of arthropod percussionists.



SEPT 14 · THURS · 4PM-7PM
Back to School Night

Teachers, BACK TO SCHOOL NIGHT will be held September 14, 2006 from 4:00 to 7:00 PM at the Museum. Teachers of all grade levels will be able to collect resource materials from the Museum, as well as other agencies and organizations.



PRESCHOOL

The Museum's hands-on Preschool **DISCOVERY ROOM**

is designed specifically for pre-kindergartners, ages 3-5.



For Class or Camp reservations or information, see inset at left.

VISITOR ACCESS

ALL AGES

MON-FRI 1:00-4:00 PM
SAT 9:30AM-NOON & 1:00-4:00 PM
SUN 1:00-4:00 PM

TIME FOR TWOS

(AGES 2 & UNDER)

2nd TUE 1:00-4:00 PM

STORY TIME

(AGES 3 TO 5)

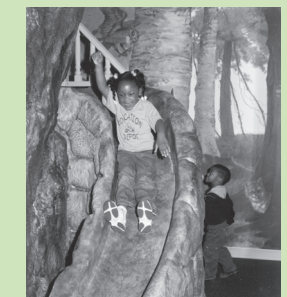
DURING MAY, AUG., & SEPT.

WED 1:15, 2:15, & 3:15 PM

DURING JUNE & JULY

TUE AND THU 10:15 & 11:15 AM

The Discovery Room may be opened at other times if a staff member or volunteer is available. Please inquire.



For more information, call Joan Elder at 601.354.7303 ext. 136.

Winning Strategy

Mississippi's Comprehensive Wildlife Conservation Strategy Approved

The Mississippi Department of Wildlife, Fisheries and Parks and other agencies have tried for years to conserve hundreds of species while operating on shoestring budgets. Certainly game species' conservation has fared well, and species in immediate peril of extinction have received some attention and funding, but these account for only 14% of all wildlife species. The other 86% have drawn little notice, and as a result species extinctions have accelerated. More than 1200 species have been placed on the federal endangered species list, and many more are proposed for listing. In Mississippi, 45 species are already federally listed and some once common species have shown sustained population decline.

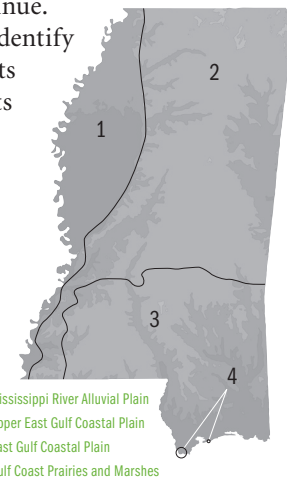
Despite our best efforts, a new approach was clearly needed. In 2002, as part of the largest conservation effort this nation has ever attempted, Congress requested that each state and territory develop a strategy for identifying species at risk and for mapping out conservation actions to address population decline. The idea was to recognize trends early and take action before species became critically imperiled and listed under the Endangered Species Act.

The Museum was given the lead role in developing Mississippi's Comprehensive Wildlife Conservation Strategy (CWCS).

Our strategy represents a proactive, non-regulatory, habitat-based approach to conserve rare and declining species and keep common species common.

A list of 297 animal species in greatest need of conservation was developed from the Museum's heritage program database and information provided by regional biologists. The strategy was organized into four ecoregions comprised of 17 natural community types and 68 sub-types. Communities were ranked according to the number of priority species linked to them. More than 175 representatives from natural resources agencies, conservation organizations, agriculture and forest products industries, and educators were challenged to address wildlife conservation in a manner that allowed other desirable activities to continue. Our collaborators helped identify 23 statewide priority threats to species and their habitats and 30 potential conservation actions needed to abate these threats.

More than two-thirds of the land in the state is privately owned. Forests cover half the land area and 37 percent is in agricultural production. The U.S. Forest Service holds the largest percentage of public land, and together with national wildlife refuges and state wildlife management areas harbors



1. Mississippi River Alluvial Plain
2. Upper East Gulf Coastal Plain
3. East Gulf Coastal Plain
4. Gulf Coast Prairies and Marshes



Many species depend on Mississippi's coastal marsh habitats.



Alabama red-bellied turtle, a species of greatest conservation need in Mississippi.

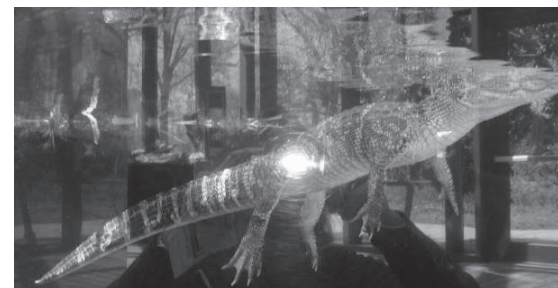
many of our endangered species. We attempted to incorporate the good work that is already being done through private land conservation programs and received input from agencies that manage large tracts of public land.

Each state's CWCS will join with the others to form a unified national plan. By sustaining natural communities, the great majority of species can be protected without having to manage each one individually – an efficient approach that helps avoid expensive last-ditch efforts to save species at the brink of extinction. Thanks to our many partners, we are pleased to announce that Mississippi's strategy was approved in January of this year. To learn more go to www.mdwfp.com/cwcs to find out about the CWCS online.



Swamp Life: Under the Water!

The Museum's Swamp exhibit represents one of Mississippi's richest and most diverse ecosystems—the bottomland hardwood swamp.



This wetland environment is characterized by large trees like the bald cypress and tupelo gum and by standing or slow moving water throughout much of the year. Swamps and other wetlands are important habitats needing our protection. They provide many benefits to the environment, wildlife, and humans, as they help maintain healthy water systems, fertile soil, and habitat for over 5000 species of plants and animals.



Housed in our 5,000 cubic-foot terrarium which holds more than 12,000 gallons of water, the exhibit still only represents small portions of a swamp habitat. The substantial six-inch thick acrylic walls give visitors a spectacular nose-to-nose view of underwater swamp life.

Fish and reptiles like very large gar, buffalo, drum, catfish, and several species of turtles call this place home. Alligators can be found hiding under logs, lurking in the foliage, or sunning themselves on the window ledges. Important wetland plants like bald cypress, southern magnolia,

tulip poplar, button bush, Louisiana iris, blue flag iris, and arrow leaf thrive in this exhibit, but one wetland resident is noticeably absent—the mosquito.

The 190 species of amphibians and 270 species of birds that depend on wetlands for survival are not housed in this exhibit, but many of them can be seen along our nature trail that meanders through the Pearl River swamps. Experiencing the museum swamp exhibit or hiking through the trails outside our doors may open your eyes to the many wonders found in Mississippi's wetlands.

This summer, each Sunday at 2:00PM visitors can interact with a diver as the fish are fed in one of the large aquariums. Fish feedings will also continue every Tuesday and Friday at 10:00AM and 2:00PM.



Confessions of a Dead Tree

You may be surprised what secrets a dead tree can share.

If you walk the trails this summer, stop to examine one of the trees that fell during Hurricane Katrina and has been cut to clear a path. There is much to be learned by examining the exposed cross-section of cut wood.

Every year a tree increases its diameter by adding a new layer (ring) of wood to its trunk. Each layer is composed of darker earlywood and lighter latewood. Starting at the bark, find the newest



earlywood and count the rings to the center of the trunk, the oldest section of the tree. The earlywood ring nearest the bark represents the year 2005. By counting the rings you can find when the tree started growing and even see how large it was the year you were born. Notice the width of the rings; wider rings indicate good growth conditions, narrow bands indicate a stressful year.

Toppled trees provide protective cover for wildlife, and with so many trees close to the trails, visitors may be surprised to find a snake in their path. Most snakes seen basking in sunspots along our trails are non-venomous. These include the garter snake, ribbon snake, black racer, yellow-bellied water snake, gray rat snake, speckled king snake, and the eastern hognose snake. Occasionally staff and visitors do encounter two species that are venomous: copperheads and cottonmouths. Copperheads may be seen along the bluff trails in late spring

and early summer. Cottonmouths prefer the floodplain of the Pearl River.

You may get a glimpse of these elusive creatures and observe them for a short time, but you should never attempt to approach, touch, or harm a snake. If a snake is blocking your path, keep the snake in sight, take two steps back, turn and walk away calmly.



To learn more about the snakes of Mississippi, be sure to attend one of the two snake lectures on Tuesday, June 6 at the Museum.

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Special thanks go to the following for their support of the current visiting exhibit: "The World of Giant Insects"

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Volunteer Notes

A "Joyful" Milestone

Museum volunteer Joy Rushing has given more than 1,000 hours of her time as a volunteer - a significant and "joyful" milestone. Joy, a retired teacher, has dedicated a large portion of her time to the Paleontology area. In recognition of her hard work, dedication, and valuable contribution to the Museum and its mission, Joy's name will be added as a distinguished volunteer on the donor recognition board in the Museum lobby. Congratulations and thanks, Joy!



Field Trip: Flight of Fancy

The Bryant Mather Chapter of the North American Butterfly Association will hold its 4th annual butterfly count around Jackson on Thursday, July 20 at 9:00AM. The Museum's NABA chapter was named for the late Bryant Mather, a founding member of the Mississippi Museum of Natural Science Foundation and an active board participant for twenty-four years. Mather was keenly interested in insects, specifically moths. Eight species of insects are named *matheri* in his honor - including five moths, two butterflies, and a fishfly he discovered.

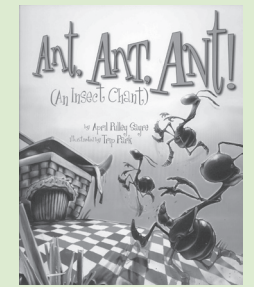


If you are interested in joining the Museum volunteers on this field trip, please call Rebecca Gruneberg at the Museum to reserve your spot. 601.354.7303

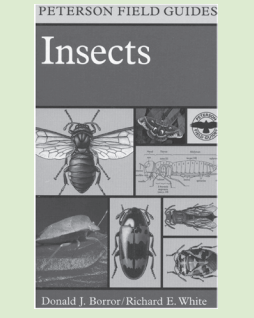
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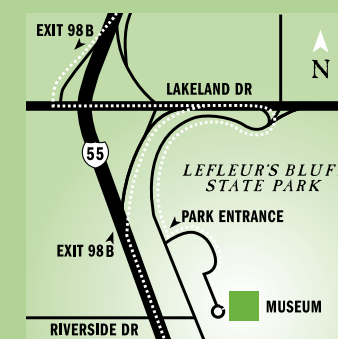
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