

149,901

visitors hosted at Museum

40,850

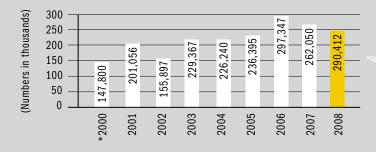
people used object kits, information, and materials

+ 99,661

Mississippians served in statewide outreach

**= 290,412** 

people served through Museum services



\*Attendance records for the Museum at our LeFleur's Bluff State Park location began in the spring of 2000. In the four short months, from opening in March to the end of the Museum's fiscal year in June 2000, we welcomed a record 147,800 visitors! ver the past year, the Mississippi Museum of Natural Science staff and volunteers have entertained and educated more than 150,000 visitors. In January, *Bone Up On Bones* educated people of all ages about the connection between bone health and overall well-being. Our first medical exhibit brought us into contact with new sponsors and volunteers eager to work for the first time with the MMNS.

In May, *Dinosaurs!* opened with nine robotic dinosaurs in their natural habitat complete with sound effects. After our busy summer months of family visitors, teachers and students in their big yellow buses filled the parking lot each fall day. This exhibit has already surpassed our attendance expectations with more than 75,000 visitors.

We now have four outreach educators whose purpose is to carry programs from the Museum into the farthest areas of the state. These dedicated staff bring their exciting programs, including live alligators and turtles, into the classroom reinforcing basic science facts and expanding the students' knowledge of the natural world.



We've also been creating opportunities for our members to experience the Museum in new ways. We hosted a "Family Night at the Museum" to allow our members to see the Museum and gardens after hours. Parents had the evening off when we held a phenomenally successful "Kid's Night Out at the Museum". We finished up with the adults only, "A Naturally Beautiful Evening". All three events expanded the way the staff and visitors thought of the MMNS experience.

Volunteers again supported every facet of operation from

greeting visitors at the door to divers who clean the aquarium glass. They helped conduct workshops and day camps and worked with our live animals. Some re-assembled and fixed skeletal remains. We have something to do for everyone and we welcome them all.

It's been another wonderful year at the Mississippi Museum of Natural Science and we're working hard to make next year even better. The spring 2009 exhibit will be *Sustainable Choices* and then our big summer 2009 blockbuster will be *Monsters of the Deep*. We continue to pursue funding to expand our research wing and to add a larger special exhibits hall. It's an uphill battle in the current economy, but one we're eagerly pursuing.

Christins Zockow

Christine Zachow MMNS FOUNDATION PRESIDENT

Illey Hortfild

Libby Hartfield
MMNS DIRECTOR

# MUSEUM FUNDING & EXPENDITURES

The charts below illustrate the Museum's state and federal funding, revenue from admissions and gift shop sales, and operating expenditures.

#### FUNDING BY SOURCE July 1, 2007 - June 30, 2008



## EXPENDITURES BY SECTIONS July 1, 2007 - June 30, 2008



# EXPENDITURES BY BUDGET CATEGORIES July 1, 2007 - June 30, 2008





he 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.

The Mississippi Museum of Natural Science Foundation is a not-for-profit 501(c)(3) organization dedicated exclusively to improving the Mississippi Museum of Natural Science (MMNS). This goal is primarily accomplished by providing and encouraging funding for the Museum from a variety of public and private sources. Private funding may come in many forms, including tax-deductible dollar donations, as well as the energy and expertise donated by laypeople and professionals.

Without the Foundation and its dedicated leaders, volunteers and membership, the Mississippi Museum of Natural Science as we know it today would not be possible. Whether through inspiring financial support for the Museum's extraordinary exhibits, recruiting manpower for the Museum's activities and research projects, or accomplishing any number of other fundraising and volunteer functions, the symbiosis between the Museum and the Foundation represents the strongest of natural relationships.

# FOUNDATION REVENUE & EXPENDITURES

These charts illustrate the private donations and grants received by the MMNS Foundation and the expenditures made with the funds.

# MMNS FOUNDATION REVENUE January - December, 2007



#### MMNS FOUNDATION EXPENDITURES January - December, 2007



# FOUNDATION LEADERSHIP

These dedicated volunteer leaders give the Museum their time and expert advice in the areas of site development, planning, exhibits, education and fundraising.

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Chris Zachow PRESIDENT Alex Alston, Jr. VICE PRESIDENT

Janice Larson SECRETARY/TREASURER

George Allen					
Alex Alston, <mark>Jr</mark> .					
Paul Bento <mark>n</mark>					
Betsy Creekm <mark>o</mark>	re				
Opal Daki <mark>n</mark>					
Marianne Demp	sey				
Ha <mark>lla Jo Ellis</mark>					
Sean Wesley El	lis				

# Dick Hall Dick Harding Libby Hartfield Matt Holleman II

**BOARD OF DIRECTORS** 

Libby Hartfield Matt Holleman III Janice Larson Jennie McIntosh Ashley Parker John Rings

# Avery Rollins Ollye Brown Shirley Catchings B. Smith Sheila Smith Scott Steele Chris Zachow

# STEADFAST SUPPORTERS

Steadfast supporters are donors who have contributed to the Foundation with years of funding through a variety of projects and interests.

ACCOMPLISHMENTS FOR FY 2007-2008

- \$558,101 donations this year to all projects
- \$3,194,118 total donations to date over 7 years

#### \$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 Goldman
Gannett Foundation/The Clarion-Ledger
Gertrude C. Ford Foundation
Phil Hardin Foundation
Mr. & Mrs. Dudley Hughes
Irby Companies
Richard McRae, Jr., Family

Foundation/Shell Marine Habitat Program
Dr. & Mrs. Steve Zachow

Mississippi Chemical Corporation

Mississippi Farm Bureau Federation

National Fish and Wildlife

#### \$25,000 - \$50,000

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

#### \$10,000 - \$25,000

The Armstrong Foundation BancorpSouth Foundation Betsy & Wade Creekmore Feild Cooperative Association Howard Industries, Inc. Mississippi Arts Commission Mississippi Forestry Association Mississippi Forestry Foundation MS Department of Environmental Quality National Geographic Society Education Foundation Nissan of North America, Inc. Sanderson Farms Soterra LLC Sprint PCS/US Unwired St. Dominic Health Services The Straddlefork Foundation Wild Turkey Federation

## **EXHIBIT SPONSORS**

Exhibit sponsors are donors who have given money to enable our Museum to host special exhibits. It takes funding and commitment to secure traveling exhibits that will relate to our educational mission and attract public attention. Museum staff work diligently for months in advance to prepare for, install, and promote visiting exhibits. This year's lineup included the contract coordination and display of three nationally acclaimed exhibits.

SPECIAL EXHIBITS/VISITORS FOR FY 2007-2008

Hunters of the Sky:

**61,361** visitors, July 1, 2007 - December 30, 2007

**65,656** total visitors; exhibit duration June 23, 2007 - December 30, 2007

Bone Up On Bones:

**56,487** visitors, January 19, 2008 - May 11, 2008

Dinosaurs!:

**26,026** visitors, May 23, 2008 - June 30, 2008

#### **HUNTERS OF THE SKY**

Regions Bank Gertrude C. Ford Foundation Merrill Lynch Mr. & Mrs. Alex A. Alston, Jr. Ergon **Dudley Hughes** Nissan of North America, Inc. Community Foundation of Greater Jackson Jackie & Avery Rollins

Joye & Scott Steele Magalen O. Bryant Melissa & David Patterson Brunini, Grantham, Grower, Hewes Chris & Steve Zachow Deborah & Hunter Dawkins **Deviney Construction Company** Nora Frances & Vaughn McRae

Rosalie B. Rotwein Ollye B. Shirley, Ph.D. Dick Hall

Newt P. Harrison Hap & Hilda Owen Patagonia/Buffalo Peak Outfitters Drs. John & Connie Schimmel

> Robert Smith, M.D. Robert & Eleanor Weaver

#### BONE UP ON BONES

Blue Cross & Blue Shield of Mississippi The Bower Foundation **Baptist Health Systems** Feild Cooperative Association Methodist Rehabilitation Center Sanderson Farms St. Dominic Health Services Marianne & Jack Dempsey Dr. & Mrs. Lawrence Haber

Mississippi Chiropractic Association Mississippi Sports Medicine Dr. & Mrs. Don Q. Mitchell Ann Myers, M.D. Jackie & Avery Rollins Carol & Cavett Taff Dr. & Mrs. Steve Zachow

#### **DINOSAURS!**

**Janet & Luther Ott** Gertrude C. Ford Foundation Paul T. Benton The Chisholm Foundation Ergon Trustmark National Bank Walker Foundation

Nissan North America Inc. Brunini, Grantham, Grower & Hewes Dr. & Mrs. Steve Zachow Avery & Jackie Rollins



John Sewell (Blue Cross & Blue Shield of Mississippi), Chris Zachow (MMNS Foundation President), Libby Hartfield (MMNS Director), Sister Dorothea (St. Dominic Health Services), and Mark Adams (Methodist Rehabilitation Center)

# **GENEROUS GIFTS**

Donations and gifts to the Museum come in all sizes for many purposes. Gifts like these make special exhibits and education programs possible.

#### GEORGIE FISHER FERN GARDEN **EXHIBIT SPONSORS**

Robbie Fisher Lagniappe Foundation

#### **BIOBULLETIN**

Cellular South Foundation

#### **EDUCATION OUTREACH SPONSORS**

Paul Benton

**Entergy Charitable Foundation** 

The King's Daughters and Sons Circle Number Two Walker Foundation

Yazoo Mississippi Delta Levee Board

Janet & Luther Ott Charitable Fund of the Community Foundation of Greater Jackson

## OTHER CONTRIBUTORS

Judy Adams

Dr. & Mrs. Eric Balfour in honor of Toby Grossman

Ms. Debbie Garrett in honor of Sara Wilmesherr's birthday

Ms. Missy Nash in honor of Sara Wilmesherr's birthday

Halla Jo Ellis Les Amies Luncheon Club

Sheila Palmer

Raising Cane's Chicken Fingers Phillip M. Walters

#### **MEMORIALS**

In memory of Rosalie Rotwein by Dale & Doris Anderson by Mary Evelyn Bell by Marianne Dempsey by Halla Jo Ellis by Sean Wesley Ellis by Virginia D. Foster by Dick Hall by Libby Hartfield

by Janice Larson by Linda B. Levy

by Chris Zachow

In memory of Mrs. Estelle Gunte Jeffcoat by Olde Towne Middle School



Photo by

Libby Hartfield (MMNS Director), Dan Bednarzyk (NISSAN North America), Janet Ott, Rob Armour (Trustmark), and Chris Zachow (MMNS Foundation President)

## FOUNDATION MEMBERSHIP

MMNS Foundation membership is more than 1,200 strong and provides vital energy and resources for Museum activities.

MEMBERSHIP NUMBERS FOR FY 2007-2008

- 348 new members welcomed
- 1,211 total members

# LIFE MEMBERS

Jan A. Allinder Alex Alston, Jr. John E. Ashcraft, Jr. Sam Beibers Katie Briggs Polly Briggs Magalen O. Bryant Kevin Caldwell Mr. & Mrs. Bill Cook Opal H. Dakin Marianne & Jack Dempsey Theo Dinkins Halla Jo Ellis Billie M. Ellison Sylvia Ann Finman Mr. & Mrs. Wesley Goings Mr. & Mrs. Chris Hall Mr. & Mrs. Richard Harding Paul Hartfield **Emily Hartfield** 

Michael & Janice LeBlanc William L. Lee Jennie McIntosh Mr. & Mrs. David McMillin John Palmer Jackie & Avery Rollins Suzanne Rotwein Rosalie Rotwein James E. Stary Carol & Cavett Taff Richard Vavrick Ellan Vavrick Robert & Janice Whitehead William Roberts Wilson, Jr. Dr. & Mrs. Steve Zachow

#### SUSTAINING MEMBERS

(\$1,000 OR MORE) Catchings B. Smith Dr. Ronald A. Javitch Betsy & Wade Creekmore

#### PATRON MEMBERS

(\$500 OR MORE) Hap & Hilda Owen

#### DONOR MEMBERS

(\$250 OR MORE) Chris Hall Dick Hall Don & Becky Potts Ernest & Beth Taylor Mr. & Mrs. Robert H. Weaver

#### FRIEND MEMBERS

(\$100 OR MORE)

Clark & April Blackwell Edie Dunn Terry Dwyer & Marcy Petrini Donna R. Godwin Lyle E. Nelson Eddie Pope Grace & George Smith

#### Memorials

Matthew Holleman, III

Rosie Rotwein, one of the Museum's beloved friends, passed away this summer. Always passionate about nature, Rosie was especially excited about the opportunities our new Museum building would provide to Mississippians. Together with her wonderful daughter, Jennie McIntosh, and other family members, she funded the Museum's two-hundred seat Rotwein Theater—utilized by hundreds of thousands of visitors for lectures, conferences and demonstrations since opening in 2000.

Rosie's love of the natural world was deep and long and was one of the defining joys of her full life. She was a friend of the Mississippi Garden



preserving the Natchez Trace in Mississippi. The Museum was fortunate to have her as a friend, long time board member and generous supporter for many years. We will always remember her smile and gentle spirit.

Clubs and one of the leaders in

Libby Hartfield, Halla Jo Ellis, Rosie Rotwein and Jennie McIntosh



Youth volunteer, Shanu Moorthy, assist children in creating fossil casts at Kids Night Out 2008.

# **VOLUNTEER SERVICES**

Volunteers are an essential part of the Museum's workforce. Volunteering at the Museum is an opportunity for teens, college students, professionals, and retirees to interact, share, learn, teach, and serve in a stimulating environment.

Nine Eagle Scouts\* have completed all or part of their Eagle requirements by contributing 259 hours to projects on the Museum's trails including the addition of seating along the existing trail and the developing fern garden trail, and adding bat houses, a picnic table and fire ring to the new Lefleur's Ridge group camping site.

\*(Jack Pitts, Alex Borst, Sean Patterson, Chip Ward, John Frey, Cameron McRae, Ryan O'Keefe, Buckner Corso & Ryan Moon)

#### **VOLUNTEER SERVICE FOR FY 2007-2008**

- More than **5,910** hours of service a dollar value of **\$94,860**!
- More than **100** active volunteers on our rolls ranging in age from **13** to **80**
- **Outdoor Projects:** Trail repairs and improvements, invasive exotic plant removal, gardening, and trash pick-up
- Museum Services: Greeting visitors, assisting in gift shop and with events, research, special projects, general office functions, exhibits interpretation and maintenance, informal programs, and aquarium diving for public fish feeding and cleaning.
- 15 volunteers have each devoted more than 1,000 hours (see list below) during the past **20** years.

#### MORE THAN 1000 HOURS OF VOLUNTEER SERVICE

Martha Boone Cooper Marianne L. Dempsey Gladys Gurman Jean Headrick Mary Bea McArdle

Mike McNeese Michael A. Stegall Halla Jo Ellis John D. Davis Billie Ellison

John Suedel Judith T. Davis Joy Rushing Lou F. Moore Peter Kuchirka

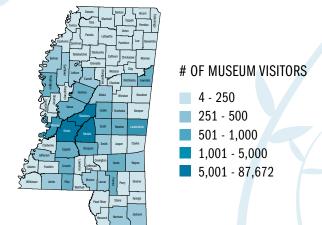


MISSISSIPPI MUSEUM OF NATURAL SCIENCE FOUNDATION



ffering something for everyone, the Mississippi Museum of Natural Science hosted within its doors 149,901 visitors from all 82 Mississippi counties, all 50 states, and 52 foreign countries this year.

With more than 30,000 square feet of display space, 100,000 gallons of aquatic attractions, and over two miles of flora and fauna-filled walking trails, these masterpieces of science, education, and entertainment are enough to keep people coming back to the Museum all year and every year.



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# PERMANENT & CHANGING EXHIBITS

Much of the Museum's public appeal comes from its collection of carefully crafted permanent exhibits within the MMNS walls and throughout its grounds at LeFleur's Bluff State Park. These installations give the Museum's educational mission substance and give the public something they can see, hear, touch and explore.

#### **EXHIBIT HIGHLIGHTS FOR FY 2007-2008**

- In 2007, the permanent Wentzscope Exhibit opened featuring four interactive Wentzscope microscopes which encourage visitors to explore the micro world through slides of sea life, plants, insects, and parasites.
- The Museum also hosted four small temporary exhibits:
  - The 2008 "Mississippi Federal Jr. Duck Stamp Art Competition" Exhibit
  - The 2007 "Federal Duck Stamp Art Competition" Exhibit
  - NASA's "Vision for Space Exploration Experience" Exhibit
  - Underwriters Laboratories "Mobile Safety Tour"

#### AQUARIUM HIGHLIGHTS FOR FY 2007-2008

- The Museum aquariums are home to more than **300** different species of aquatic animals that are successfully maintained by aquarium staff and volunteers in an attractive and healthy environment. Public fish feedings conducted by expert underwater divers have been enhanced by our underwater communications system that allows the diver to converse with the public.
- More than **1,419** participants enjoyed "Got FISH? / Something's Fishy" in FY 08. Panels of professional anglers offered sessions on bass, saltwater and crappie fishing. Youngsters enjoyed behind-the-scenes aquarium tours, demonstrations on how to prepare fish diets, how to feed the fish, aquarium maintenance procedures, hands-on touch tanks with live animals and fish feedings with SCUBA divers.
- More than **750** "Katfishin' Kids" received hands-on instruction from professional anglers while baiting their hooks and fishing for stocked catfish.

#### TRAIL HIGHLIGHTS FOR FY 2007-2008

- With the help of the Foundation's financial match of a Recreational Trails Program (RTP) grant, we have installed new trail signs on the bluff and upper slough on the red and purple trails. Over the past four years, we have put new gravel on almost the entire trail system, built **2** handsome observation decks on our sloughs and decks, and installed signage. This work makes the trails function better.
- 1 new LeFleur's Ridge Boy Scout and Girl Scout camping area was established in the park and is reached by a hike down the purple (river) trail from the Mayes Lake trail-head. It is great for cool weather camping!
- **9** Eagle Scouts have completed all or part of their Eagle requirements with trails construction projects including completion of the Georgie Fisher Memorial Fern Garden trail. (see page 11 Volunteer Article)
- Millsaps undergraduates and high school students from the Millsaps Summer Mission Fest worked on various trails and outdoor facilities improvements.



NASA's "Vision for Space Exploration Experience" Exhibit provided visitors a vivid glimpse into the nation's ambitious future in space.



Volunteer diver, Mike Lucius, talking with a group of visitors before a fish feeding.



Scouts enjoying the new LeFleur's Ridge cool weather scout camping area.

# SPECIAL EXHIBITS

#### Hunters of the Sky

(**61,361** visitors, July 1, 2007 - December 30, 2007)

**(65,656** total visitors; exhibit duration June 23, 2007 - December 30, 2007) *Hunters of the Sky* was acclaimed for its creative exhibit topics, such as the raptor dinner party. Life-size dioramas featuring specimens of eagles, hawks, falcons, owls, and the endangered condor illustrated the majesty of these great birds of prey. Dramatic live raptor demonstrations highlighted the exhibit.

#### Bone Up On Bones

(**56,487** visitors; exhibit duration January 19, 2008 – May 11, 2008) In January 2008, the Museum opened its first medical exhibit and brought about new partnerships with the local medical community. Visitors were invited to see themselves from the inside out as they uncovered the marvels of the human skeletal system through hands-on exhibit activities and multimedia presentations.

MUSEUM MARKETING AND AWARDS HIGHLIGHTS FOR FY 2007-2008

- **149,901** visitors hosted at the Museum
- **36,000** new visitors welcomed to www.msnaturalscience.org with **216,000** page views
- Launched the "Creature Comforts" call-in radio show on Mississippi Public Broadcasting about all the critters big and small, wild and domestic in Mississippi. Thursday mornings at 9:00, listen and learn with veterinarian Dr. Troy Majure and Museum Director Libby Hartfield.
- AAA Southern Travel Treasure Award American Automobile Association
- Family Favorite Best Museum for Kids Award by Jackson's Parents & Kids Magazine readers
- Best Museum Award for the 8th year in a row by Jackson Free Press readers
- Silver Award ADDY Awards of the American Advertising Federation, Jackson for the *Hunters of the Sky* campaign



#### Dinosaurs!

(**26,026** visitors, May 23, 2008 – June 30, 2008) (exhibit duration May 23, 2008 - January 4, 2009)

Amazing and lifelike robotic creatures roared into the Museum in June 2008 to delight visitors until January 4, 2009 and welcomed 26,026 visitors in the first five weeks. From a *Protoceratops* with hatchlings to a *Tyrannosaurus rex*, these realistic, robotic dinosaurs are fascinating children and adults alike in record numbers. Hear them roar, and watch them feed and care for their young. See the *Pteranodon*, the prehistoric sky king, whose wingspread was as wide as a soccer goal. Find out which dinosaur had eyes as big as soccer balls and possibly binocular vision. Understand how the horn-faced *Triceratops* protected itself from attackers and how much time the peaceful *Apatosaurus* may have spent in the water and why. Each creature is individually handcrafted and computer-programmed.

- Silver Award ADDY Awards of the American Advertising Federation, Jackson for the Museum Foundation's 2005-2006 Annual report
- Silver Award ADDY Awards of the American Advertising Federation, Jackson for the Museum's fence-line signage.



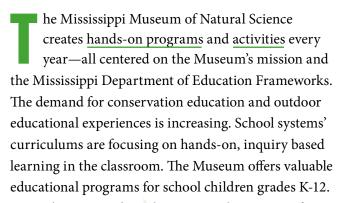
ANNUAL REPORT 2007-2008



# **EDUCATION**

# learn

# teach



The Museum's twelve person education staff is comprised of coordinators, naturalists, and outreach educators. The staff draws on their diverse backgrounds to educate teachers, students, and the general public about natural Mississippi and its inhabitants. In addition, the Museum draws upon the scientific community at large to inspire staff and visitors through lectures, panels, and literature.

The Museum designs and coordinates an enormous amount of <u>educational resources</u>, including printed materials, videos and object kits for loan and online activities.

Educational programs on the Museum's campus and in statewide outreach come in many forms:

- Age appropriate, curriculum coordinated, hands-on programs (Museum campus & statewide outreach programs)
- Instructional resources:
   printed materials, videos,
   object kits, and web-based
   activities
- Teacher workshops:
   Project WILD, Project
   WET & Preschool Teacher
   Workshops
- Answers to information requests and technical guidance
- Professional contributions to scientific publications
- Lectures







Hands-on activities during Fun Fridays-Prehistoric Reptiles

# MUSEUM PROGRAMS

Visiting groups to the Museum can choose from a number of activities, depending on their objectives & time schedules. Every year the Museum provides age-appropriate, curriculum coordinated, hands-on programs in many subject areas for grades K through 12. Teachers can choose from these topics: mammals, birds, reptiles, amphibians, fish, invertebrates, plants or fossils. The Museum also offers an in-depth, hands-on wetlands program in which students become wetland researchers and learn to appreciate the importance of wetlands. We also have fun and learning for preschoolers. Our Preschool Discovery Room was filled all year long with children ages 3 through pre-kindergarten 5 and their caregivers for age-appropriate hands-on learning.

Our summer program showcases <u>Camp WILD</u>, an annual summer camp adventure that puts kids in the middle of nature for an amazing week of educational experiences. Camp Wild's theme this year was "prehistoric" camp to correlate with our current exhibit *Dinosaurs!*.

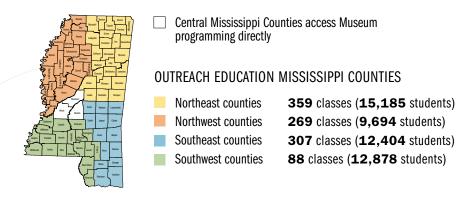
This summer also included the <u>Junior Naturalist Camp</u> designed to allow aspiring naturalists to learn what it is like to scientifically study nature. The theme this year was "The Span of Time" focusing on prehistoric life, and included an overnight in the Museum on the last night of camp and a first time field trip to the Choctaw Indian Fair. Our <u>Preschool summer camp</u> theme was "WOW"- worms, owls, and wild things. Camp activities included hands-on, age-appropriate centers and activities, an interactive group time, adventures in the Museum and on the trails, and a variety of art projects.

#### STUDENT PROGRAMS AT MMNS FOR FY 2007-2008

- **7** Camp WILD summer sessions with **119** in attendance
- **3** Stewpot Kids summer camp sessions with **71** in attendance
- Junior Naturalist Camp program with **24** in attendance
- **255** preschool group classes with **3,483** in attendance
- **14** preschool summer camp sessions with **210** kids and caregivers in attendance
- Junior Duck Stamp Art Competition sponsorship, exhibition, and reception with **552** entries
- Got Fish/Something's Fishy annual hands-on activity day with **1,419** participants
- **642** in-house, hands-on programs with **21,663** participants

## STATEWIDE OUTREACH PROGRAMS

Through a wide range of specially designed programs, projects, and events, the outreach educators bring the Museum's unique hands-on approach to learning to schoolchildren and adults statewide. Over the last five years, our outreach program has conducted 5,099 programs with 205,202 participants. This year we were able to expand our outreach program to the southwest portion of the state. We now provide education outreach to all 82 Mississippi counties.



#### **EDUCATION OUTREACH FOR FY 2007-2008**

- **1,023** interactive classroom programs taught statewide
- **50,161** students instructed directly
- **40,850** people used object kits, information, materials, and technical guidance



Outreach Educator Crystie Baker delighted campers with a baby alligator at Camp Wheeze-Away.

# TEACHER WORKSHOPS

The Museum maximizes its staff expertise and extends its influence by providing workshops all over the state that prepare teachers to fulfill state curriculum requirements in their own classrooms.

<u>Project WILD</u> is an interdisciplinary conservation and environmental education program emphasizing wildlife. Project WILD educational materials are provided to educators through practical, interactive 6-hour workshops. The program, designed for educators of grades K-12, capitalizes on the natural interest that children and adults have in wildlife by providing hands-on activities that enhance all subject and skill areas.

Project WET is an interdisciplinary water science and education program for formal and non-formal educators of K-12 students and also is taught in 6-hour workshops. The mission of this program is to teach responsible water stewardship through excellent and effective water education. The *Project WET Curriculum and Activity Guide*, is a collection of innovative, water-related activities that are hands-on, easy to use, and fun! Providing a thorough water education program, the guide also addresses the chemical and physical properties of water, quantity and quality issues, aquatic wildlife, ecosystems, and management strategies.

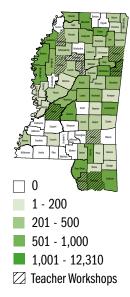
#### TEACHER SERVICES AT MMNS FOR FY 2007-2008

- 23 six-hour teacher workshops for Project WILD & Project WET (organized and conducted for 381 participants)
- **2** preschool teacher workshops for **48** participants
- 1 Back-to-School Night teacher resource event



Casting bird tracks at a Project WILD Teacher Workshop

#### # OF OUTREACH PROGRAM PARTICIPANTS



# **COMMUNITY & STATEWIDE EVENTS**

## Community Events



The Museum hosts a number of ongoing and annual events that present unique opportunities for learning. Adult programming with dynamic lectures, live animal demonstrations, and creative activities adds spice to an already flavorful, family-focused menu of educational topics, including fishing, fossil collecting, and bird watching.

#### COMMUNITY ACTIVITIES AT MMNS FY 2007-2008

- **10** Naturalist Lectures presented by experts including our annual Snake Day event
- 8 Fun Fridays for families
- **150** interactive Fish Feedings
- 8th annual NatureFEST! a celebration of all things natural
- 7th annual Make-a-Splash water-awareness day
- 5th annual Fossil Road Show exhibits, expert opinions, and lectures
- 8th annual Got Fish? fishing seminars with the experts and 3rd annual Something's Fishy
- **23**rd annual Snake Day hands-on reptile showcase
- International Migratory Bird Day celebration
- Native Plant Garden annual tours and lectures
- **3** Christmas Programs with **144** participants

#### Statewide Events

The Museum provides an array of educational and entertainment opportunities to the broader community through lectures and live animal demonstrations. It also holds a variety of popular annual events designed to bring special audiences together to enjoy activities centered around specific topics, such as fishing, fossil collecting, bird watching, and family fun. For instance, this fiscal year, through partnerships with the Mississippi Wildlife Federation and Wal-Mart, Katfishin' Kids provided more than 750 kids with the chance to get their feet wet in learning the skills of fishing and engaged more than 200 parents and adults!

#### STATEWIDE COMMUNITY OUTREACH FY 2007-2008

- Educational materials: provided to Mississippi Department of Wildlife, Fisheries and Parks (MDWFP) Conservation Officers for programs
- Participated in Mississippi Wildlife Extravaganza, Bass Pro Shop event, Great Delta Bear Affair, and Hummingbird Festival, Outdoorama on the Rez, Waterfest
- More than **750** "Katfishin' Kids" received hands-on instruction from professional anglers while baiting their hooks and fishing for stocked catfish.
- 2 issues of Natural Newsline newsletter published

# THE LIBRARY

In 1965, Miss Fannye A. Cook, the Museum's founding director, donated her private collection of research materials to the Museum. Since then, that donation has grown into the Museum's marvelous Research Library housing more than 15,000 volumes. These volumes chronicle Mississippi's natural history in detail.

#### LIBRARY HIGHLIGHTS FOR FY 2007-2008

- **15,000** volume Research Library maintained and open to the public
- **1,846** reference requests answered: phone, interlibrary loan, and conference
- **125** journal volumes were bound for the Library's permanent collection.
- **500** reports and books were cataloged and entered into the Museum Library collection via Pro-Cite in-house database.
- Re-published (in CD format) Mississippi Bird Songs, recorded by Bill Turcotte
- 10 Naturalist Lectures presented by experts including our annual Snake Day event

- September 2007 California Condors:
  From the Brink of Extinction to the Brink of Recovery
  Speaker: Jesse Grantham, California Condor Program Coordinator,
  Hopper Mountain National Wildlife Refuge Complex, USFWS, Ventura, CA
- October 2007 Nesting Ecology and Sibling Behavior of Red-Shouldered Hawks: It's a Hawk Eat Hawk World Out There Speaker: Jim Bednarz, Ph.D., Professor, Wildlife Ecology, Arkansas State University, Jonesboro, AR
- November 2007 Osprey Migration through North America
  Speaker: Mark Martell, Director of Bird Conservation, Audubon Minnesota,
  St. Paul, MN
- February 2008 DEM BONES More Than Just a Rack to Hang Your Skin On! Speaker: George Phillips, Paleontologist, MMNS, Jackson
- March 2008 Protecting and Enhancing A Local River:
  How Memphis Started a Community Greening Movement
  Speaker: Keith Kirkland, Executive Director, Wolf River Conservancy, Memphis



#### *Naturalist Lecture Series*

The lectures are on the first Tuesday of each month in the Museum's Rotwein Theater from NOON until 1 pm.

#### NATURALIST LECTURE SERIES FOR FY 2007-2008

- July 2007 Raptors Galore!

  Speaker: David Hall, Master Falconer and Director, Wildlife Outreach Foundation, Jackson, MS
- August 2007 Northern Swallow-Tailed Kite Recovery:
  Implications of Predation, Reproduction and Social Behaviors
  Speaker: Jennifer Coulson, Ph.D., Ecology and Evolutionary Biology, President,
  Orleans Audubon Society, Louisiana

- April 2008 Historical Ecology of Forest and Grasslands in Mississippi Speaker: Timothy J. Schauwecker, Ph.D., Assistant Professor, Department of Landscape Architecture, Mississippi State University
- May 2008 Bats: A Fly-by-Night Affair
  Speaker: Chester Martin, Research Emeritus, Environmental Laboratory, U.S.
  Army Engineer Research & Development Center, Corps of Engineers, Vicksburg
- June 2008 De-mystifying Mississippi Snakes at Snake Day: Live displays of Mississippi venomous and non-venomous snakes Speaker: Terry Majure, Aquarium Coordinator, MMNS, Jackson

Photo by



he Museum's Conservation and Biodiversity Section consists of three broad and overlapping programs:

Natural Heritage, Biological Collections, and Research.

The team of 18 is made up of coordinators, biologists and technicians. Their primary mission is to facilitate conservation by studying, documenting and monitoring Mississippi species and ecosystems. Staff also participate in planning and management to promote conservation through the Museum's South Mississippi Conservation Program and other initiatives.

Among the Conservation and Biodiversity Section's many accomplishments are the partnerships that it has formed with others. Over the past year the team has worked side by side with individuals, organizations and other state and federal agencies, providing information, insight and support for conservation efforts. In FY 2007-2008, they handled more than 2,985 requests for information about non-game species and their habitats and management.



(top) Crayfish (above) Sean McGregor, Research Assistant, sampling for crayfish.



Gulf Fritillary butterfly enjoys Ironweed nectar in the Museum's native gardens.

# NATURAL HERITAGE PROGRAM

The Natural Heritage Program manages a <u>comprehensive database</u> of Mississippi species, communities, systems and natural areas of conservation concern. A primary objective is ensuring that the database is scientifically current and accurate. Information contained within the database is readily available to resource managers and land developers, and provides guidance for species conservation and wise use of land and water resources.

NATURAL HERITAGE HIGHLIGHTS FOR FY 2007-2008

- **912** elements (rare species and biological communities) tracked
- **14,000** new records relating to elements added
- 480 environmental project reviews performed

# Scenic Streams Program

The Scenic Streams Program encourages landowners to voluntarily protect special habitats and streamside areas either through non-binding conservation agreements or long-term conservation easements. State and Federal income tax incentives exist for landowners who protect these areas through the creation of conservation easements.

SCENIC STREAMS HIGHLIGHTS FOR FY 2007-2008

- Noxubee River successfully nominated in 2008 Legislative Session as **10**th Scenic Stream
- 150 Best Management Practice Agreements received on 9 previously nominated streams

# BIOLOGICAL COLLECTIONS

Since their beginning in 1935, our Biological Collections have grown to contain more than 930,000 specimens, representing the largest single reference for Mississippi vertebrate animals, freshwater mussels, crayfish, and fossils. In addition, the MMNS curates collections of plants, insects, and DNA specimens. These irreplaceable specimens document the species diversity, distribution, ecology, conservation status and heritage of Mississippi. They are an essential source of information for use by resource managers, biologists and educators.

**COLLECTIONS HIGHLIGHTS FOR FY 2007-2008** 

- **587** new collections added through staff efforts or donations
- **44,524** new specimens cataloged
- **932,000** specimens curated
- **65** loans to other museums or education institutions



Jeremy Copley and Sean McGregor, Research Assistants prepare mussel specimens



LaToya Turner, Collections Assistant, with fish specimens

#### RESEARCH AND MONITORING

MMNS research seeks to protect Mississippi's history and heritage by contributing to the knowledge of Mississippi's species and biological communities. Much of the research at MMNS focuses on surveys for occurrence, abundance, and distribution of non-game species. MMNS paleontological research provides the background that increases our understanding of current and future patterns of species and biological communities. Information from these research activities provides the foundation for understanding and appreciating the biodiversity of Mississippi. In addition, MMNS researchers conduct ecological, monitoring, and other research to provide information essential for conservation and protection of some of our state's rarest species.

#### RESEARCH HIGHLIGHTS FOR FY 2007-2008

- More than **\$963,000** in federal funds awarded for research projects
- Collaboration with University of Southern Mississippi (USM) and The Nature Conservancy (TNC)



Erik Lang, USM-GCRL graduate student checking trap for saltmarsh topminnow



Dr. Bob Jones, MMNS Herpetologist, evaluating pond for gopher frog

# COUNTIES WHERE RESEARCH WAS CONDUCTED IN FY 08



# Completed and On-going Projects

Research and monitoring activities carried out or administered by Museum staff generally target plants, plant communities, and nongame wildlife within Mississippi. This includes living and extinct species not traditionally managed as sport game or fish, and comprises the vast majority of the fauna and flora of the state.

COMPLETED AND ON-GOING PROJECTS FOR FY 2007-2008

- Swallow-tailed kite surveys
- Bald eagle monitoring
- Piping plover habitat use
- Population trends of ringed sawback turtles
- Mississippi gopher frog monitoring (TNC)
- Eastern spotted skunk and long-tailed weasel surveys
- Post-Hurricane Katrina assessment of gulf sturgeon habitat and movement of the juvenile cohort (USM)
- Small mammal, reptile, and amphibian survey on Upper Sardis Wildlife Management Area
- Habitat characteristics and life history of Saltmarsh topminnow (USM)
- Population structure and trophic ecology of Alabama shad (USM)
- Isotope ecology of late Pleistocene (40-10 thousand years ago)
- Systematics and distribution of Upper Cretaceous (85-66 million years ago) sea urchins
- Molecular phylogenetics and phylogeography of Cottogaster fishes (USM)
- Mississippi amphibian monitoring Statewide
- More than **40** fish sampling trips Big Black , Mississippi River, Tennessee, Yazoo, Pearl and Tombigbee Rivers
- More than 200 crayfish, mussel, mammal, and reptile and amphibian sampling trips 40+ counties

ringed sawback turtle

# Planning and Management

Conservation staff participated in a variety of planning and management activities to address conservation of rare or declining species in Mississippi including the listed activities below.

#### PLANNING AND MANAGEMENT ACTIVITIES FOR FY 2007-2008

- Mississippi Prescribed Fire Council
- Mississippi Bat Diversity Working Group
- Mississippi Exotic Pest Plant Council
- Gulf Sturgeon Working Group
- Pallid Sturgeon Working Group
- US Forest Service Planning meetings
- Mississippi Coastal Impact Planning Meetings
- Longleaf pine restoration on Mars Wildlife Management Area
- Invasive species control on Wildlife Management Areas



Jeanne-Marie Havrylkoff, USM-GCRL graduate student, with juvenile Gulf sturgeon

#### Publications and Technical Reports

Museum staff contribute to a variety of scholarly journals and other publications.

Museum Technical Reports are cataloged and housed in the Museum Library.

#### PUBLICATIONS AND TECHNICAL REPORTS FOR FY 2007-2008

- Dugo, M.A., W.T. Slack, and B.R. Kreiser. 2008. Molecular systematic, phylogeography, and population genetics of Fundulus dispar and Fundulus blairae (Cyprinodonliformes: Fundulidae): Year 1 Progress. MMNS Technical Report No. 139. Funded by U.S. Fish and Wildlife Service, State Wildlife Grant Report, SWG 04.
- Leary, C.J., J.L. Dobie, **T.M. Mann**, P.S. Floyd and D.H. Nelson. 2008. *Pseudemys alabamensis Baur* 1893 Alabama red-bellied cooter, Alabama red-bellied turtle. In: Rhodin, A.G.J., Pritchard, P.C.H., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., and Iverson, J.B. (Eds.). Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs No. 5, pp. 019.1-019.9, doi:10.3854/crm.5.019.alabamensis.v1.2008, http://www.iucn-tftsg.org/cbftt/.
- **Phillips, G.E.** 2008. Fossil goniasterid sea stars in the Southeast. Journal of the Mississippi Academy of Sciences 53(1): 119.
- **Phillips, G.E.**, and C.N. Ciampaglio. 2007. Late Cretaceous echinoderms in the Central Gulf states: An update. Journal of the Mississippi Academy of Sciences 52(1): 88.
- **Phillips, G.E.**, and C.N. Ciampaglio. 2008. Faujasiid echinoids in the Upper Cretaceous of North America. Journal of the Mississippi Academy of Sciences 53(1): 118.
- **Phillips, G.E.**, and G.L. Stringer. 2007. Paired fish otoliths from possible coprolites in the Glendon Limestone (Oligocene, Rupelian) of Central Mississippi. Journal of Vertebrate Paleontology 27(3): 130A.
- **Surrette, S.B.**, and J. S. Brewer. 2008. Inferring relationships between native plant diversity and *Lonicera japonica* in upland forests in north Mississippi, U.S.A. Applied Vegetation Science 2: 205-214.
- **Surrette, S.B.**, S.M. Aquilani, and J.S. Brewer. 2008. Current and historical composition and size structure of upland forests across a soil gradient in north Mississippi. Southeastern Naturalist 7: 27-48.
- **Winstead, N.A.** 2007. Wintering Piping Plover and Snowy Plover ecology in coastal Mississippi. MMNS Technical Report No. 138. Funded by U.S. Fish and Wildlife Service, Project E-1, Segment 21.



Piping Plover - Photo by Bill Stripling

#### COUNTY VISITORS OUTREACH 237 375 Adams Alcorn 21 257 296 0 Amite 283 667 Attala 0 7 Benton 444 2.104 Bolivar 61 402 Calhoun Carroll 321 207 83 63 Chickasaw Choctaw 68 355 0 Claiborne 70 Clarke 240 36 Clay 178 608 Coahoma 39 1,340 716 0 Copiah 0 127 Covington Desoto 111 914 Forrest 972 12,310 Franklin 245 0 80 35 George 35 50 Greene Grenada 103 16 Hancock 191 574 Harrison 281 3.190

87,672

604

122

53

4

343

85

295

652

94

98

493

1,386

235

989

116

454

964

510

10,962

277

8

189

116

373

625

45

403

64

82

2,020

166

0

71

305

3.058

350

0 0

279

124

91

470

1,046

0

704

859

352

30

1.476

800

0

2,810

564

147

589

120

695

1,416

234

1.458

# MAP OF MISSISSIPPI COUNTIES



		40=
Perry	203	195
Pike	628	0
Pontotoc	74	237
Prentiss	33	173
Quitman	14	250
Rankin	11,549	1,750
Scott	671	0
Sharkey	236	72
Simpson	601	0
Smith	289	375
Stone	61	200
Sunflower	357	549
■ Tallahatchie	91	232
Tate	24	205
Tippah	25	0
Tishomingo	23	463
Tunica	6	0
Union	65	1,033
Walthall	68	0
Warren	1,776	85
Washington	507	1,430
Wayne	292	0
Webster	72	207
─ Wilkinson	17	0
Winston	177	290
Yalobusha	78	0
Yazoo		

#### MISSISSIPPI MUSEUM OF NATURAL SCIENCE

Libby Hartfield

**Charles Knight** ASSISTANT MUSEUM DIRECTOR

#### **ADMINISTRATION**

Mary Jenkins EXECUTIVE ASSISTANT

Connie Gore GIFT SHOP MANAGER

Mary Stevens LIBRARIAN

Harold Garner FACILITIES MAINTENANCE MANAGER

Fran Noone

Charles Jeffcoat CUSTODIAN

#### AQUARIUMS

Karen Dierolf AOUATIC BIOLOGIST

Bryan Fedrick ADJUATIC BIOLOGIST

Chris Smith AQUARIUM ASSISTANT

Mike Stegall

#### **EDUCATION**

Angel Rohnke

Crystie Baker OUTREACH NATURALIST

John DeFillipo OUTREACH NATURALIST

Joan Elder PRESCHOOL EDUCATOR

Megan Ellis OUTREACH NATURALIST

Jonathan Harris EDUCATOR

Yolanda Hawkins **EDUCATION ASSISTANT** 

Rebecca Jones SPECIAL PROJECTS COORDINATOR

> Isabel Kelly PRESCHOOL EDUCATOR

Joseph M. McGee OUTREACH NATURALIST

Ann Peden VOLUNTEER SERVICES

Nicole Phillips NATURALIST

Corey Wright NATURALIST

#### **EXHIBIT MANAGEMENT**

Norton McKeigney

Ray Terry

Sherry Surrette, Ph.D. NATURAL HERITAGE PROGRAM

Adrianne Clark

Aaron Francois

**Andy Sanderson** 

Matt Smith

DATABASE MANAGER

BOTANIST

**Andrew Whitehurst** SCENIC STREAMS/NATURAL AREAS COORDINATOR

# AND COLLECTIONS

Jeremy Copley COLLECTIONS/RESEARCH

Scott Peyton

NATURAL HERITAGE PROGRAM

COORDINATOR

DATABASE TECHNICIAN

DATABASE TECHNICIAN

Tom Mann

Heather Sullivan

# RESEARCH

Lisa Yager, Ph.D.

ASSISTANT

R.L. Jones, Ph.D. HERPETOLOGIST

Sean McGregor CONSERVATION ASSOCIATE BIOLOGIST

COLLECTIONS MANAGER George Phillips

PALEONTOLOGY CURATOR

Kathy Shelton

Todd Slack, Ph.D.

LaToya Turner

Nicholas Winstead ORNITHOLOGIST

#### MISSISSIPPI DEPT. OF WILDLIFE, **FISHERIES & PARKS**

Sam Polles, Ph.D. EXECUTIVE DIRECTOR

Al Tuck DEPUTY DIRECTOR

Robert Cook DEPUTY ADMINISTRATOR

#### **COMMISSIONERS**

John C. Stanley IV

**Bryan Jones** VICE CHAIRMAN

Jerry Munro

Charles Rigdon



Museum Biologists, Dr. Bob Jones and Dr. Todd Slack, discuss the importance of scientific collections at NatureFEST 2008.

Hinds

**Holmes** 

Humphreys

Issaguena

Itawamba Jackson

Jasper

Jefferson

Jones Kemper

Lafayette

Lamar

Lauderdale

Lawrence

Leake Lee

Leflore

Lincoln

Lowndes

Madison

Marion

Marshall

Monroe

Neshoba

Newton Noxubee

Oktibbeha

Panola

Pearl River

Montgomery

Jefferson Davis 60



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