

MISSISSIPPI
Museum of
Natural
Science



HUNTERS OF THE SKY

JUNE 23 - DECEMBER 30, 2007

Children of all ages can fly high with *Hunters of the Sky*, a hands-on national traveling exhibit about Raptors—the great birds of prey.

For thousands of years, raptors have gripped the human imagination, being revered as divine messengers, prized as hunting companions, and celebrated as symbols of power. Visitors will explore the biology and ecology of raptors—eagles, hawks,

falcons, owls, and the reclusive condor—diverse and complex birds of prey whose survival is fundamentally linked to humans.

In addition to life-size dioramas that illustrate the majesty of raptors in their natural habitats, *Hunters of the Sky* offers



many interactive components to engross both children and adults: give a “hoot” in the ‘hooting’ booth (listen and mimic owl calls); compare a predator’s wingspan to the reach of your own arms; or try your hand at a ‘feeding puppet’ used

to raise young captive-bred condors. Other exhibits include a wind tunnel that illustrates how birds fly, birds-eye-view footage shot from gliders, and an x-ray exhibit with radiographic images of injured birds.

Highlighting the exhibit will be periodic showings of live birds of prey each Saturday at 11AM and 2PM in the Museum’s Rotwein Theater. Visitors can view these majestic birds up-close and learn fascinating facts from David Hall of the Wildlife Outreach Foundation. Live hawks will fly in a demonstration, giving visitors an appreciation of why these birds are such successful hunters of the sky.

The Museum’s Fun Fridays and First Tuesday Lecture Series will also feature birds throughout the run of the exhibit.

SPECIAL EXHIBIT

Hunters of the Sky

Meet Your Match

JUN 23 - DEC 30, 2007



We share their same basic needs for survival. Come explore the wonders of these great birds of prey in our largest special exhibit yet. Learn how they fly, how they see, and how they hunt.

ANNOUNCEMENT

Jr. Duck Stamp State Winner



Catherine Cardneau, a student at Cathedral High School in Natchez, MS, is the winner of the Best of Show award in the 2007 Mississippi Junior Duck Stamp Art Competition. Ms. Cardneau's acrylic paint depiction of a Ruddy Duck was submitted by her teacher, Andréé Gamberi and competed for the national awards at the Federal Junior Duck Stamp office in Washington, D.C.

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

VOL. 25 • NO. II • SUMMER 2007

MISSISSIPPI
Museum of
Natural
Science

MISSISSIPPI DEPARTMENT OF
WILDLIFE, FISHERIES AND PARKS

Sam Polles, Ph.D.
EXECUTIVE DIRECTOR

Al Tuck DEPUTY DIRECTOR Robert Cook DEPUTY ADMINISTRATOR

COMMISSIONERS

William C. Deviney, Jr. CHAIRMAN John C. Stanley IV VICE CHAIRMAN
Bryan Jones JERRY MUNRO

MUSEUM STAFF

Libby Hartfield
MUSEUM DIRECTOR

ADMINISTRATION

Mary Jenkins
ADMINISTRATION
COORDINATOR

Connie Gore
GIFT SHOP MANAGER

Harold Garner
FACILITIES MAINTENANCE
MANAGER

Shirley Hall
CUSTODIAL SUPERVISOR

Charles Jeffcoat
CUSTODIAN

Brandy Jenkins
ADMINISTRATIVE
ASSISTANT

Fran Noone
RECEPTIONIST

Mary Stevens
LIBRARIAN

Clarence White
ADMINISTRATIVE
ASSISTANT

AQUARIUMS

Terry Majure
AQUARIUM COORDINATOR

Karen Dierolf
AQUATIC BIOLOGIST

Bryan Fedrick
AQUATIC BIOLOGIST

Mike Stegall
AQUARIST

EDUCATION

Georgia Spencer
EDUCATION COORDINATOR

John DeFillipo
OUTREACH NATURALIST

Joan Elder
PRESCHOOL COORDINATOR

Megan Ellis
OUTREACH NATURALIST

Rebecca Gruneberg
SPECIAL PROJECTS
COORDINATOR

Yolanda Hawkins
EDUCATION ASSISTANT

Isabel Kelly
PRESCHOOL EDUCATOR

Joseph M. McGee
OUTREACH NATURALIST

Angel Rohnke
NATURALIST

Nicole Smith
NATURALIST

Sarah Wheelless
OUTREACH NATURALIST

Corey Wright
NATURALIST

EXHIBIT
MANAGEMENT

Norton McKeigney
EXHIBITS SUPERVISOR

Ray Terry
EXHIBITS SUPERVISOR

RESEARCH

Charles Knight
RESEARCH COORDINATOR

Melanie Howarter
BIOLOGICAL DATA
MANAGER

Adrienne Clark
DATABASE TECHNICIAN

Mark Dugo
ICHTHYOLOGIST

R.L. Jones, Ph.D.
HERPETOLOGIST

Tom Mann
BIOLOGIST

Scott Peyton
COLLECTIONS MANAGER

George Phillips
PALEONTOLOGY CURATOR

Richard Rummel
WILDLIFE SPECIALIST

Kathy Shelton
BIOLOGIST

Alison McCartney
FIELD BIOLOGIST /
DATABASE SPECIALIST

Todd Slack, Ph.D.
ICHTHYOLOGIST

Heather Sullivan
BOTANIST

Ian Thompson
RESEARCH ASSISTANT

LaToya Turner
LABORATORY
ASSISTANT

Andrew Whitehurst
SCIENCE STREAMS /
NATURAL AREAS
COORDINATOR

Nicholas Winstead
ORNITHOLOGIST

Brad Young
BLACK BEAR BIOLOGIST



This summer we hope you will join us to enjoy *Hunters of the Sky*, the largest exhibit the Museum has ever mounted!

Make sure to check out the calendar inside for Fun Fridays, exciting First Tuesday Lectures and teacher workshops that build on the raptor theme. Our Education Department has also developed a new teacher workshop, "Museum Resources", to help serve teachers statewide.

We thank the donors that are making this dynamic exhibit possible.

Looking forward to seeing you in the Museum.

Libby Hartfield
Libby Hartfield
MUSEUM DIRECTOR

In Memoriam

Recently our Museum staff was saddened by the loss of two long-time volunteers. These diligent supporters have devoted countless hours of service in essential Museum tasks, making our work more complete and our natural community a better place.



Former Museum staff member and volunteer **Betsy Wages** passed away in November 2006. She was a faithful employee, volunteer, friend, and dedicated educator, who loved the Museum's nature trails and wildlife. Her family and friends have dedicated one of the beautiful stone benches along the nature trail in her honor and invite you to celebrate her rich life with nature.



Katherine Jones was a consistent and cheerful volunteer in the Museum's library. Every week she assisted librarian Mary Stevens in sorting and shelving books, special projects, and other library tasks. She will be remembered for her optimistic attitude, quick wit, and genuine friendship in support of the Museum and her co-workers.

Please join us in expressing heartfelt sympathy to the family and friends of Betsy and Katherine.

NEW STAFF



Kathy Shelton is the new State Wildlife Grants program biologist. She will coordinate and conduct research and monitoring on wildlife in south Mississippi. Shelton earned her B.S. in Wildlife Sciences from North Carolina State University and her M.S. in Wildlife from Mississippi State University. She comes to us from the Wildlife Division of Mississippi Department of Wildlife, Fisheries and Parks, where she was the public lands biologist in south Mississippi.



The cheerful voice you hear upon calling the Museum these days is our new receptionist, **Fran Noone**. A native of Jackson, Fran is a lover of nature and has two children and two grandchildren who make visits to the Museum a favorite pastime.

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

The Mississippi Museum of Natural Science, the Mississippi Wildlife Federation, 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.

Kids will learn what a fish is and become familiar with aquatic habitat. They will gain skills in knot tying, lure selecting, hook baiting,

and line casting. We'll stock the pond with catfish and let them try their hand at fishing. Each participating child will receive a goodie bag and free T-shirt while supplies last. Lunch will also be provided free of charge.

This event is free to all and no equipment is needed so make plans to join us on June 2 for our annual Katfishin' Kids! For more information or to volunteer call 601-354-7303.



Mark your calendars: June 2nd from 7AM to 10:30AM at the Ross Barnett Reservoir.



SPECIAL EVENTS

QUICK CALENDAR



Katfishin' Kids

SAT · JUNE 2
Turcotte Lab off Hwy 43
7AM to 10:30AM

Fun Fridays

10AM to NOON
(except June 1)

Snake Day:
Mississippi Style

TUES · JUNE 5
10AM to 3PM
Presentations at 10AM and NOON

Fun Fridays
Hands-on activities for everyone.

Fun Fridays are interactive, hands-on programs offered every Friday in June (except June 1) and July from 10AM to NOON.

Program topics coordinate with the *Hunters of the Sky* exhibit opening at the Museum on June 23rd. An adult must accompany children.

DATES	TOPIC
June 8	For the Birds
June 15	Bird Brains
June 22	Home Tweet Home
June 29	Name that Bird Sound
July 6	Birds in the News
July 13	Feathers, Talons, Beaks & Feet
July 20	Birds & Beyond
July 27	Feathered Flocks



Snake Day:
Mississippi Style
Learn how to tell the difference between venomous and non-venomous snakes.

information about our native snakes and their valuable place in the ecosystem. Live Mississippi snakes will be exhibited, with experts on-hand to answer your questions.

One hour lectures are scheduled at 10AM and NOON. There will also be displays of venomous and non-venomous snakes from 10AM until 3PM. Speaker, Terry Majure, is Aquarium



Biologist Terry Majure will de-mystify our much-maligned native reptiles – SNAKES! Learn the characteristics that will help you recognize the differences between the six venomous and 55 non-venomous snakes found in Mississippi. Majure will separate myth from reality and provide accurate

Coordinator for the Museum of Natural Science. Snake exhibits are provided by Terry Vandeventer, Living Reptile Museum, of Terry, MS.

A Rarely Seen Visitor

You're going to have to be diligent and patient if you want to see a Long-eared Owl, a rare sight in Mississippi.

Or you can simply visit the congregation of Mississippi raptors perched together in the museum exhibit hall. This display provides an up-close view of native birds of prey that are found here year-round, as well as some seasonal visitors.



Long-eared Owl
Photo by Dobak

The long-eared owl, an occasional winter visitor to Mississippi, looks like a smaller version of a Great-Horned Owl, with the same distinctive ear tufts (only closer together). Bill Turcotte, one of our state's foremost conservationists, collected the specimen in the raptor display in northwest Hinds County on December 24, 1956. Author of *Birds of Mississippi* (University Press, 1999) with David L. Watts, Turcotte notes only seven recorded observations for the Long-eared Owl.

In addition to the Long-eared Owl, other rarely-seen winter birds in the display are the Short-eared Owl and the Golden Eagle. Summer may bring the Mississippi Kite and the Broad-winged Hawk within view, and in winter you may catch a glimpse of the Merlin, Northern Harrier, or Peregrine Falcon.

BILL TURCOTTE

began his first scientific collecting at age 13, roaming the countryside around Clinton collecting bird eggs. Hired by the Game and Fish Commission in 1936 as a taxidermist, he began working as an assistant to Fanny Cook, the founding director of the museum. His career with the Game and Fish Commission spanned 43 years, during which he served in various administrative positions, including executive director of the agency. *Birds of Mississippi* is wonderfully colored by many personal accounts of his own sightings. Turcotte died November 7, 2000.



William H. Turcotte

Museum Monitors Raptor Populations



Osprey carrying a Baracuda
Photo by Bill Stripling

Raptors, or birds of prey, include many different species with a wide variety of behavior patterns.

Some species feed primarily on rodents, fish, or carrion, while others depend on insects, snails, and other invertebrates. Hawks, eagles, and falcons are active during the day, while owls are typically active at night. Some species are present year-round in Mississippi, and some are here only during the breeding or non-breeding season.

Over 30 species of raptors have been recorded in Mississippi, although only a little more than half of these are regularly found in the state. The Mississippi Comprehensive Wildlife Conservation Strategy designates six raptors as "species of greatest conservation need". They include Osprey, Swallow-tailed Kite, Bald Eagle, Southeastern American

Kestrel (the subspecies of American Kestrel that breeds in the Southeast), Barn Owl, and Short-eared Owl. The major causes for concern include contaminants, shooting, and habitat loss.

The Museum is involved in conservation efforts on behalf of all of these species, and currently is occupied in monitoring efforts specifically targeted at Bald Eagles and Swallow-tailed Kites.

Bald Eagle populations declined drastically in the mid- to late 1900s due to diminished survival as a result of mistreatment by humans and a decrease in reproduction rates as a result of DDT contamination. The species was declared endangered by the *Endangered Species Act* and gradually began to recover. Thanks to the banning of DDT and other recovery efforts by numerous state and federal agencies and non-governmental organizations, Bald Eagle numbers have increased to the point that their status has been lowered to threatened, and they are being considered for removal from the Endangered Species List.

Nesting Bald Eagles have been monitored throughout the state since the early 1970s, and we currently observe, with the help of volunteers, 30-40 known active nesting territories.



Swallow-tailed Kites are beautiful birds that live in both North and South America. The birds found in the U.S. are here only during the breeding season and historically were observed in over 20 states. Due to human mistreatment and habitat loss, they are now restricted to small portions of five to six Southeastern states including Mississippi. Bottomland hardwood forests along the Pearl and Pascagoula Rivers in Mississippi are important breeding areas for this bird, however we do not have a good estimate of how many stay in Mississippi during the breeding season. The Museum is partnering with Audubon Mississippi to survey south Mississippi for Swallow-tailed Kites in order to understand what their true numbers are in the state and learn what can be done to help protect them and their habitat.



Swallow-tailed Kite
Photo by Jennifer Coulson

ONGOING

Come On Outside!

Visit the Museum's Native Plant Garden and nature trails to experience the wonders 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!

Fish Feeding

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

Creature Features

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

First Tuesdays

Naturalist Lecture Series
On the first Tuesday of the month, the Museum offers lectures addressing a variety of natural science subjects. Unless noted otherwise, the lectures take place from NOON 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: \$5.00 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.



JUNE 2 · SAT · 7AM-10:30AM · EVENT
Katfishin' Kids

Located at Turcotte Lab off Hwy 43 at the Ross Barnett Reservoir. Free for children 5-14 to teach them about fishing. Parents invited, and equipment is provided. For information, call 601-354-7303.



JUNE 5 · TUE · 10AM-3AM · EVENT
Snake Day

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



JUNE 5 · 10AM-11AM & NOON-1PM · LECTURES
SPEAKER: Terry Majure
Aquarium Coordinator, Museum of Natural Science, Jackson, MS

Learn how to recognize the differences between the six venomous and 55 non-venomous snakes found in Mississippi. Majure will provide accurate information about our native snakes and their valuable place in the ecosystem.

JUNE 8 · FRI · 10AM-NOON
Fun Friday
For the Birds

JUNE 15 · FRI · 10AM-NOON
Fun Friday
Bird Brains

JUNE 19 · TUE · 10AM-12:00PM
Volunteer training for Hunters of the Sky exhibit

JUNE 22 · FRI · 10AM-NOON
Fun Friday
Home Tweet Home



JUNE 23 · SAT · EXHIBIT PREMIERE
Hunters of the Sky

JUNE 29 · FRI · 10AM-NOON
Fun Friday
Name that Bird Sound



JULY 3 · TUE · NOON-1PM · LECTURE
RAPTORS GALORE!

SPEAKER: David Hall
Master Falconer and Director, Wildlife Outreach Foundation, Jackson, MS
Eagles, hawks, falcons, owls, kites, osprey and harriers are all raptors! Their beaks are hooked and they seize and kill their quarry using powerful feet and sharp talons. David Hall's talk will focus on conservation education about raptors and how scientists use raptors as barometers of environmental health. He uses these magnificent birds as

ambassadors to teach about all living creatures and their conservation needs. Live raptors will be highlighted in the program.

JULY 6 · FRI · 10AM-NOON
Fun Friday
Birds in the News

JULY 10-11 · TUE-WED · \$10
Wild About Birds
Teachers earn 1.0 CEU credits via this Project WILD workshop. See column at right for details.

JULY 12 · THURS · 9AM-3:30PM · \$10
Project WET Teacher Workshop
Teachers earn .6 CEU credits. See column at right for details.

JULY 13 · FRI · 10AM-NOON
Fun Friday
Feathers, Talons, Beaks & Feet

JULY 20 · FRI · 10AM-NOON
Fun Friday
Birds & Beyond

JULY 24 · TUE · 9AM-3:30PM · \$10
Museum Resources Teacher Workshop
Teachers earn .6 CEU credits. See column at right for details.
JULY 25 · WED · 9AM-3:30PM · \$10

Project Aquatic WILD
Teachers earn .6 CEU credits. See column at right for details.

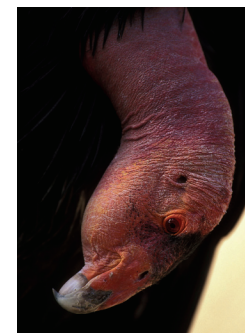
JULY 27 · FRI · 10AM-NOON
Fun Friday
Feathered Flocks



Photo by Jennifer Coulson

AUG 7 · TUE · NOON-1PM · LECTURE
NORTHERN SWALLOW-TAILED KITE RECOVERY

SPEAKER: Jennifer Coulson
PhD, Ecology and Evolutionary Biology, President, Orleans Audubon Society, Louisiana.
Dr. Jennifer Coulson will present findings from her long-term study on the population ecology of the northern Swallow-tailed Kite, a subspecies whose limited numbers are causing concern. She will talk about factors that appear to be limiting the population, as well as life-history traits and social behaviors that may be hindering recovery. It is estimated that fewer than 2,500 breeding adults remain of the northern subspecies.



SEPT 4 · TUE · NOON-1PM · LECTURE
CALIFORNIA CONDORS

SPEAKER: Jesse Grantham
California Condor Program Coordinator, Hopper Mountain National Wildlife Refuge Complex, USFWS, Ventura, CA

One of the world's rarest and most imperiled birds, the California Condor, was rescued from the brink of extinction by captive breeding and release, but still faces great challenges. From only 22 condors left in existence, their numbers have risen to 289 this year. They now fly free in central and southern California, in Arizona and in Baja, Mexico. They are also beginning to reproduce in the wild. Jesse Grantham, currently the coordinator of the condor project, also worked on condors in the early days of the recovery effort and will update us on their current status and future challenges.

SEPT 6 · THURS · 4PM-7PM
Back to School Night
Teachers of all grades will collect resource materials from the Museum, as well as other agencies and organizations.



Photo by Bill Stripling

OCT 2 · TUE · NOON-1PM · LECTURE
NESTING ECOLOGY & SIBLING BEHAVIOR OF RED-SHOULDERED HAWKS

SPEAKER: Jim Bednarz
PhD, Professor, Wildlife Ecology, Arkansas State University, Jonesboro, AR

This presentation will summarize research on the densest nesting population of Red-shouldered Hawks ever documented (nearly 7 nests/square mile). The study involved a collaborative research effort by Kathleen Townsend and Jim Bednarz done in the St. Francis Sunken Lands of northeastern Arkansas. For this work, Townsend and Bednarz

experimentally provided supplemental prey to 10 nests and studied the behavior of nestlings and adults by mounting video cameras at nests.

OCT 27 · SAT · 10AM-3PM
Slither, Crawl & Fly
Join the Museum to learn about creatures such as snakes, spiders, birds, and bats.



Photo by Bill Stripling

NOV 6 · TUE · NOON-1PM · LECTURE
OSPREY MIGRATION THROUGH NORTH AMERICA

SPEAKER: Mark Martell
Director of Bird Conservation, Audubon Minnesota, St. Paul, MN

Using satellite monitored radios, scientists are able to track Ospreys and other raptors from their breeding grounds in the United States to wintering areas in South America. Learn the details of when they leave, where they go, and how they get there.

TEACHERS

WET and WILD Opportunities for Teachers

The Museum will offer two environmental education programs, Project WILD and Project WET. Workshops cost \$10.00 each. Mississippi College will offer CEU credits for an additional fee.

Project WILD
(Wild About Birds) is a 10 hour workshop offering 1.0 CEU's:
July 10 4PM-9PM &
July 11 9AM-3:30PM.

Project WET
on July 12 from 9AM-3:30PM offers .6 CEU's.

Project Aquatic WILD
on July 25 from 9AM-3:30PM offers .6 CEU's.

Museum Resources
a new teacher workshop will be conducted July 24 from 9:30AM-3:30PM and will offer .6 CEU's.

Learn how to schedule a field trip, check out a resource kit, and take a behind-the-scenes tour of the Museum and our Research Department facilities. Please bring a lunch to the workshops. Contact Georgia Spencer at 601-354-7303 for information and to register.

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

601.354.7303

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

Visitor Access

PRESCHOOL CHILDREN
MON-FRI 1-4PM
SAT 9:30AM-NOON & 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, & 3:15PM (AUG-MAY)
TUE AND THU 10:15 & 11:15AM (JUNE-JULY)

Reserved Group Access

MON-FRI 9, 9:45 & 10:30AM (AUG-MAY)
WED AND FRI 9, 9:45, 10:30AM (JUNE-JULY)

JULY - AUGUST CLASSES

"Who Needs Wings! I Have Eight Legs!"

Children will understand that spiders should be respected and not feared. They will appreciate the diversity and uniqueness of spiders and their webs, as well as their usefulness in insect control.



DISCOVERY ROOM

Call
601.354.7303

for information, reservations & resources

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

SEPTEMBER - OCTOBER CLASSES
"Rise and Shine - Time to Eat!"
(a study of day/night animals)

Children will understand that many animals look for food during the day; others seek food during the night. They will note that some animals hunt at twilight.

NOVEMBER CLASSES

"Love that Salt Water!"
(a study of marine animals)

Children will appreciate the diversity of marine animals. They will become familiar with ocean mammals, invertebrates, and fish.



Hunters Down Below

Birds may be the supreme hunters of the skies, but snakes are master hunters on the ground.

Much-maligned and very misunderstood, snakes are a very important part of the ecosystem. Visit the Museum terrariums and aquariums to see a number of Mississippi's native snake species in natural habitats.

Mississippi's venomous snakes include Coral snakes and these pit vipers: Copperhead, Cottonmouth or Water Moccasin, Canebrake or Timber Rattlesnake, Pygmy Rattlesnake, and the Eastern Diamondback Rattlesnake. Most venomous snakes have markings or physical characteristics that can be used to tell them apart. Coral Snakes may resemble non-venomous Milk Snakes or Scarlet King Snakes, but their color pattern of red and yellow bands next to each other make it easy to tell the difference. Pit Vipers have thicker bodies than other snakes, and generally have short, slender tails and a head that is much wider than the neck. The largest venomous snakes that occur in Mississippi are the Diamond-Back Rattlesnake of southern Mississippi and the Timber Rattlesnake, which is prevalent throughout much of the state.

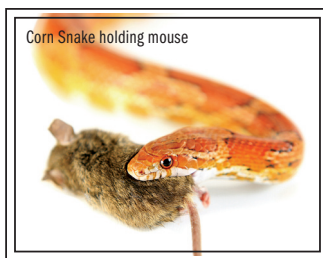


Besides their appearance, snakes have other unique attributes that more specifically help them find their food. In order to hunt, snakes that live above ground are equipped with crystal-clear vision and good depth. Also, with the use of heat sensing organs, some snakes, like the Cottonmouth, can even hunt prey at night. The name "pit viper" comes from the heat sensitive pit between the eye and nostril on both sides of the head. In addition, snakes also use their tongue to sniff out their surroundings.

Snakes prey on all types of species ranging from insects to rodents to fish and even other snakes. With jaws that can expand up to 150 degrees, snakes have no trouble preying on animals larger

than themselves. Unlike humans, snakes do not use their teeth to chew their food, but rather to grip it. Instead, they use their muscles to crush the food and push it into their digestive tract. Venomous snakes like the Coral snake have the advantage of fangs which bite into the prey and inject poison that can kill or subdue the animal making it easier to eat. Non-venomous snakes often use their powerful muscles to squeeze and suffocate their prey in a method called constriction.

Snakes play an important role in our environment by helping regulate the population of moderate size rodents including squirrels, mice, rats, shrews, and even birds. The Corn Snake, known as "the farmer's friend", got its name from the cornfields in which it is most commonly found—hunting the mice that eat the farmer's corn.



Mississippi is also home to a tremendous variety of water snakes. Not all snakes found in water are the venomous Cottonmouth or Moccasin. Most are water snakes such as the Diamond-Back Water Snake, Broad-Banded Water Snake, Midland Water Snake, Yellow-Bellied Water Snake, or the Mississippi Green Water Snake. These snakes



hunt aquatic animals such as fish and amphibians. There are even three species of water snakes that hunt and eat crayfish.

The best way to overcome any anxiety about snakes is to learn more about them. Visit the Museum to see some of these earthbound hunters and learn how important they are to our survival. Don't miss our most unusual snake display—a two-headed Grey Rat Snake!



The Call of the Wild

Many types of raptors are seen and heard by visitors to our nature trails.

Some of these birds call our woodlands home, but others are occasional visitors. Barred owls are large birds that roost in the cypress sloughs behind the Museum and near Mayes Lake. Visitors can hear owls in these two locations "talking," in a distinctive pattern of hoots (hoo – hoo – hoo – hoohoo). Some people remember the call as "Who cooks for you? Who cooks for you all?" One owl will call another, and soon receive a reply. The Great-horned Owl and the Eastern Screech Owl are less commonly seen. The Great-horned Owl's call is a deep "who" that is repeated. The tiny Screech Owl's call is an eerie whinny or a long trill of one note.

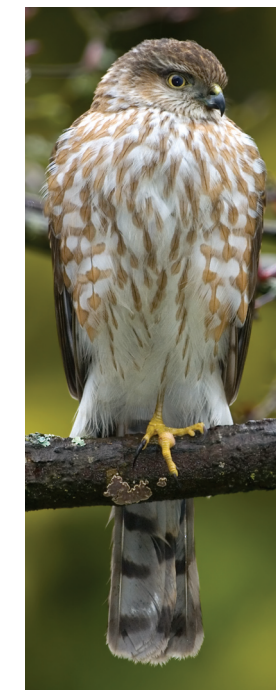
Several raptors may only be seen soaring over the Pearl River and our forest, catching thermal uplifts. These include vultures, large hawks, and occasionally kites. Visitors have seen two types of vultures: black vulture (buzzard) and turkey vulture. The Black Vulture has pale whitish wing edges and a shorter tail than the Turkey Vulture, which has silver patches on the lower wing surface.



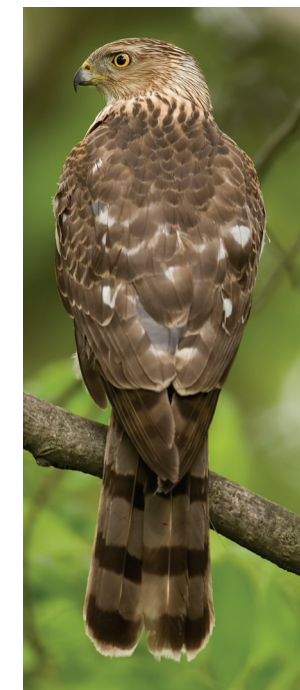
The Red-tailed Hawk is a frequently heard hawk, with its piercing single "tseeearr" call. The Red-shouldered Hawk is another often heard species with a repeated cry of "keeahh." It is identified by translucent crescents of white under its wings and a tail with alternating bands of black and white. The Broad-winged Hawk also has a black and white banded tail, but has a broad black border to its wings. The Swallow-tailed Kite with its distinctive white underside, black wings, and deeply forked tail, can be seen catching thermals over the lower river. The Mississippi Kite is gray with a black tail and whitish head, and may be seen catching insects along Eubank's Creek.



Two small hawks are frequently seen near the Museum: the Sharp-shinned Hawk and Cooper's Hawk. Both prey upon the birds that come to our bird feeders in the Museum exhibit area. The Sharp-shinned Hawk can be distinguished from the Cooper's Hawk by its squared off corners of its tail versus the rounded corners of the Cooper's Hawk.



Sharp-shinned Hawk



Cooper's Hawk

FIRST SATURDAY OF EACH MONTH (except Dec and Jan)
Lefleur's Bluff State Park Campground • 8:10AM • \$2
Jackson Audubon Society Bird Walks
for Family Groups & Beginners

Join experienced birders and members of Jackson Audubon Society for a walk on the wild side. Children must be accompanied by parents; Unaccompanied young people must be 15 years of age. Enter through the Mayes Lake entrance off Lakeland Drive and meet in the parking lot of the picnic/pavillion area.



For more information, call Mary Stevens at 601.956.7444.

Steadfast Supporters

\$100,000–\$200,000

Abe Rotwein Family
The Chisholm Foundation
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
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
Mississippi Chemical Corporation
Mississippi
Farm Bureau Federation
National Fish
and Wildlife Foundation/
Shell Marine Habitat Program
Dr. & Mrs. Steve Zachow

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

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

Regions Bank
Gertrude C. Ford Foundation
Merrill Lynch
Nissan of North America, Inc.
Ergon
Dudley J. Hughes
Mr. & Mrs. Alex Alston
Jackie & Avery Rollins
Joye & Scott Steele
Magalen O. Bryant
Brunini, Grantham,
Grower & Hewes
Chris & Steve Zachow
Deborah & Hunter Dawkins

\$25,000–\$50,000

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

\$10,000–\$25,000

The Armstrong Foundation
BancorpSouth Foundation
Feild Cooperative Association
Howard Industries, Inc.
Jackson Convention
& Visitor's Bureau
Mississippi Arts Commission
Mississippi Forestry Association
Mississippi Forestry Foundation
National Geographic Society
Education Foundation
Nissan of North America, Inc.
Regions Bank
Soterra LLC
Sprint PCS/US Unwired
The Straddlefork Foundation
Weyerhaeuser Company
Foundation
Wild Turkey Federation

When you join the MMNS Foundation, you get so much more than just member benefits...

You get the satisfaction of knowing you are protecting our state's rare and endangered species, supporting important biological research, and educating our young people. As a Foundation member, you will help further our core mission of promoting the understanding and appreciation of Mississippi's biological diversity. Your contribution will also enable us to enhance and expand the Museum's work well into the future.

MEMBERSHIP CATEGORIES

- Individual (\$35)
- Donor (\$250)
- Sustaining Member (\$1,000 or more)
- Family (\$60)
- Patron (\$500)
- Corporate Member (\$5,000 or more)
- Friend (\$100)
- Benefactor Member (\$750)

Other donor/sponsor opportunities are available. Call 601.354.7303

NAME _____ PHONE _____

ADDRESS _____

CITY/STATE/ZIP _____

GREAT MUSEUMS ARE BUILT ON STRONG FOUNDATIONS. BECOME PART OF THAT FOUNDATION TODAY.

If children are to be included in this membership, please check one of the following (not valid for Individual Memberships). This membership is for:

- Parents and their children under age 18
- Grandparents and up to four grandchildren under age 18
- Other adult family members and up to four children under age 18

Relationship to children: Aunt/Uncle
 Guardian

If you checked one of the above, please list name and date of birth of each child. (may attach additional pages)

NAME _____ DOB _____

NAME _____ DOB _____

New Members/Donors

Sustaining
Betsy A. Creekmore
JACKSON, MS
Deborah & Hunter
Dawkins
PASS CHRISTIAN, MS

Friend
Edie Dunn
JACKSON, MS
Lyle E. Nelson
STARKVILLE, MS
Eddie Pope
MAGEE, MS
Grace & George Smith
JACKSON, MS

Family
Risa Webb Aleithaw
MADISON, MS
Heidi Allen
JACKSON, MS
Melissa & Jerry
Barlow
RICHLAND, MS
Angela & Robert
Blaine
JACKSON, MS
Tim & Vivian Brown
JACKSON, MS
Barbara Brunson
JACKSON, MS
Celia Burnham
JACKSON, MS
Shelle Cedotal
FLORA, MS
Tracy Chippendale
BRANDON, MS
Tim & Daisy Crawford
JACKSON, MS
Angie Davis & Jamie
Davis
RICHLAND, MS
Linda Dove
VICKSBURG, MS
R.B. Ellison, Sr.
BRANDON, MS
Grace Ensz
FAYETTEVILLE, TN
Mark & Stephanie
Farrior
WAYNESBORO, MS
Deidra Floyd
PEARL, MS
Tanya Fritz
RIDGELAND, MS
Jack & Ashley Gram
JACKSON, MS
Kathy Gregg
JACKSON, MS
James P. Grissom
RIDGELAND, MS

Individual
Tina Geddes
LONG BEACH, MS
Joseph N. Goodell
MADISON, MS
John Gwaltney
CRYSTAL SPRINGS, MS
Bobby Locke
BRANDON, MS
Jim Wingrove
JACKSON, MS
Lori Marshall
MADISON, MS
Sherry & Marvin
Milner
RIDGELAND, MS
Mignonette Mitchell
WATKINSVILLE, GA
Carla Modrak
PEARL, MS
Sara Whelan Morgan
JACKSON, MS
Stephanie Oliver
MADISON, MS
David Reynolds
JACKSON, MS
Bob Richardson
MADISON, MS
Timothy J. Riggs
JACKSON, MS
Shannan & Christos
Schwartz
ESCATAWPA, MS
Patrick & Anne
Severson
CLINTON, MS
Elizabeth Shields
BRANDON, MS
Dee P. Spencer
CLINTON, MS
D. Starks & R. Starks
BRANDON, MS
Scott & Joye Steele
JACKSON, MS
Stewart & Vicki
Swayze
JACKSON, MS
Laura Uecker
JACKSON, MS
Andrew & Karen
Walling
BRANDON, MS
Stephanie & Cory
Wilson
JACKSON, MS

Brian & Leah Harris
CLINTON, MS
William R. Hawkins
TUPELO, MS
Thomas & Courtney
Hewitt
RIDGELAND, MS
James & Jamie Hoover
JACKSON, MS
Mark Hutchison
MADISON, MS
Nzinga Wms-Jupiter &
Omodare Jupiter
JACKSON, MS
John & Marty Kwasny
BRANDON, MS
Lori Marshall
MADISON, MS
Sherry & Marvin
Milner
RIDGELAND, MS
Mignonette Mitchell
WATKINSVILLE, GA
Carla Modrak
PEARL, MS
Sara Whelan Morgan
JACKSON, MS
Stephanie Oliver
MADISON, MS
David Reynolds
JACKSON, MS
Bob Richardson
MADISON, MS
Timothy J. Riggs
JACKSON, MS
Shannan & Christos
Schwartz
ESCATAWPA, MS
Patrick & Anne
Severson
CLINTON, MS
Elizabeth Shields
BRANDON, MS
Dee P. Spencer
CLINTON, MS
D. Starks & R. Starks
BRANDON, MS
Scott & Joye Steele
JACKSON, MS
Stewart & Vicki
Swayze
JACKSON, MS
Laura Uecker
JACKSON, MS
Andrew & Karen
Walling
BRANDON, MS
Stephanie & Cory
Wilson
JACKSON, MS

Xueyuan Wang &
Yueguo Xu
JACKSON, MS
Devinay Construction
Company
JACKSON, MS
Nora Frances &
Vaughn McRae
JACKSON, MS
Rosalie B. Rotwein
JACKSON, MS
Dr. Olyve B. Shirley
JACKSON, MS
Dick Hall
JACKSON, MS
Newt P. Harrison
JACKSON, MS
Hap & Hilda Owen
JACKSON, MS
Patagonia/Bufalo
Peak Outfitters
VENTURA, CA/JACKSON, MS
Drs. John & Connie
Schimmel
JACKSON, MS
Robert Smith, M.D.
JACKSON, MS
Robert & Eleanor
Weaver
JACKSON, MS
Neil & Karen
Whitworth
BRANDON, MS
Jan A. Allinder
BRANDON, MS
Barbara Austin
JACKSON, MS
Buford & Susan Clark
MADISON, MS
The Clay Firm
JACKSON, MS
John & Judith Davis
JACKSON, MS
Richard & Joyce
Dorch
JACKSON, MS
Dr. Edgar Draper
JACKSON, MS
Halla Jo Ellis
TERRY, MS
Sean Wesley Ellis
TERRY, MS
Alice Harper
GREENWOOD, MS
Thomas & Courtney
Hewitt
JACKSON, MS
Brenda F. Hyde
JACKSON, MS
Daniel & Pamela
Johnson
VICKSBURG, MS

**Hunters of the Sky
Exhibit Donors**
Regions Bank
JACKSON, MS
Gertrude C. Ford
Foundation
JACKSON, MS
Merrill Lynch
RIDGELAND, MS
Nissan of North
America, Inc.
NASHVILLE, MS
Ergon
JACKSON, MS
Dudley J. Hughes
JACKSON, MS
Mr. & Mrs. Alex Alston
JACKSON, MS
Jackie & Avery Rollins
MADISON, MS
Joye & Scott Steele
RIDGELAND, MS
Magalen O. Bryant
MIDDLEBURG, VA
Brunini, Grantham,
Grower & Hewes
JACKSON, MS
Chris & Steve Zachow
JACKSON, MS
Deborah & Hunter
Dawkins
PASS CHRISTIAN, MS
Melissa & David
Patterson
CANTON, MS
Janet and Luther Ott
Charitable Fund
of the Community
Foundation of
Greater Jackson
JACKSON, MS

Joan Marie Kaye
JACKSON, MS
Christine Liberto
JACKSON, MS
Chester O. Martin
JACKSON, MS
Dick Mason III
JACKSON, MS
Mark & Sharon
McCreery
JACKSON, MS
Jennie McIntosh
BRANDON, MS
Mr. & Mrs. Mike
McNames
JACKSON, MS
Dr. & Mrs. Brantley
B. Pace
MONTICELLO, MS
Barry & Barbara
Powell
JACKSON, MS
Emily & Tim Smith
JACKSON, MS
Charles & Emily Clark
JACKSON, MS
Robby & Martha
Toombs
BRANDON, MS
James & Jeanne
Tucker
JACKSON, MS
W. Scott & Mary Anne
Welch
JACKSON, MS
Charles & Sandra
West
JACKSON, MS
Mr. & Mrs. Don West
JACKSON, MS
Dr. John Wofford
JACKSON, MS
J. Kane & Betty Ditto
JACKSON, MS
John & Ann Fournet
JACKSON, MS
Eileen Giudice
BRANDON, MS
William A. &
Betty Hays
JACKSON, MS
J. H. Hines
JACKSON, MS
Brooks Mosley
JACKSON, MS
N & W Construction
Company
JACKSON, MS
Billy Simmons
CLINTON, MS

Dr. & Mrs. Frank M.
Wiygul, Jr.
JACKSON, MS
John & Jodi Nabors
VANCOUVER, WA
Richard Benton
CLINTON, MS
Betty T. Duckworth
JACKSON, MS
Arthur Finkelberg
RIDGELAND, MS
C.A. Hatchell, Jr.
JACKSON, MS

**Education
Outreach
Sponsors**
Paul Benton
BILOXI, MS
Entergy Charitable
Foundation
NEW ORLEANS, LA
Janet and Luther Ott
Charitable Fund
of the Community
Foundation of
Greater Jackson
JACKSON, MS
The King's Daughters
and Sons Circle
Number Two
GREENVILLE, MS
Walker Foundation
JACKSON, MS
Yazoo Mississippi
Delta Levee Board
CLARKSDALE, MS

**Other
Contributors**
Richard & Suzanne
Chandler
RALEIGH, NC
University of Southern
Mississippi
Department of
Biological Sciences
HATTIESBURG, MS
Heather Murray
BRANDON, MS



FOUNDATION

The Mississippi Museum of Natural Science Foundation is the lifeblood of our Museum, providing man-power, financial assistance and moral support. The Foundation Board of Directors invites you to join today!

OFFICERS
Chris Zachow
PRESIDENT
Alex Alston, Jr.
VICE PRESIDENT
Janice Larson
SECRETARY/TREASURER

BOARD OF DIRECTORS
George Allen
Alex Alston, Jr.
Kevin Caldwell
Betsy Creekmore
Opal Dakin
Marianne Dempsey
Theo Dinkins III
Halla Jo Ellis
Sean Wesley Ellis
Dick Hall
Dick Harding
Libby Hartfield
Matt Holleman III
Janice Larson
Bobby Locke
Jennie McIntosh
John Rings
Avery Rollins
Rosalie Rotwein
Olyve Brown Shirley
Catchings B. Smith
Sheila Smith
Scott Steele
Chris Zachow

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

Call 601.354.7303 for more information.

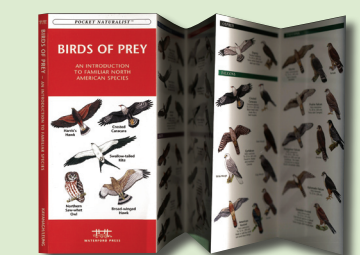
DRAGONFLY SHOPPE

Each month the Museum store offers a thoughtful selection of gift items that coordinate with current exhibitions and educational programming.

Featured this summer:



**RAPTORS OF NORTH AMERICA
JIGSAW PUZZLE (550 PIECES)**
\$15.99



**BIRDS OF PREY
"AN INTRODUCTION TO FAMILIAR
NORTH AMERICAN SPECIES"
(POCKET NATURALIST)**
\$5.95

(Add \$3.50 shipping and handling for mail orders)

Foundation members receive a 10% discount.

SHOPPE HOURS
MON-SAT 9:00AM - 4:00PM
SUN 1:00 - 4:00PM

The Dragonfly Shoppe is a Mississippi Museum of Natural Science Foundation sponsor.



Peter is collecting sea urchins and sea stars at a fossil site in Starkville, MS.

Volunteer Notes

Peter Kuchirka reaches 1,000-hour milestone

Congratulations to Peter Kuchirka for reaching the 1,000-hour milestone of volunteer service. Peter began volunteering at the Museum in March of 2005. A former volunteer with the Vertebrate Paleontology Section at the Carnegie Museum of Natural History, Peter was trained in the molding and casting of fossil bones.

Volunteering with MMNS Paleontology, he has created replicas of our most valuable and rare fossils, from sea urchins to rhinoceros leg bones. Peter has also cleaned, repaired, and reconstructed many fossil specimens that were otherwise unusable. Peter's name will be added to the donor recognition board in the Museum lobby with our appreciation and sincere thanks!

MISSISSIPPI
Museum of
Natural
Science

2148 RIVERSIDE DRIVE
JACKSON, MS 39202-1353

DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

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

NON-PROFIT ORG.

U.S. POSTAGE

PAID

JACKSON, MISS.

PERMIT NO. 932

DON'T MISS THE GRIPPING ACTION THIS SUMMER

The *Hunters of the Sky* special exhibit will feature:

LIVE Raptors

Each Saturday

11:00AM & 2:00PM

The Museum's Rotwein Theater



The Mississippi Museum of Natural Science is located on I-55 at Lakeland Drive—within Lefleur's Bluff State Park—



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

MUSEUM HOURS

MON-FRI 8:00AM to 5:00PM

SAT 9:00AM to 5:00PM

SUN 1:00 to 5:00PM

ADMISSION

Adults: \$5

Children Under 3: FREE

Children 3-18: \$3
School Groups of 10
or more: \$2/person

Senior Citizens 60 and over: \$4
Members: FREE