

MISSISSIPPI
Museum of
Natural
Science

Lost in the Amazon

Photographic Exhibition by Stephen Kirkpatrick
Showcases the Wonders and Perils of the Rainforest

Lost in the Amazon, an exhibit featuring the work of renowned wildlife photographer Stephen Kirkpatrick, opens at the Museum February 4, 2006.

The 40 color photographs on display all appear in Kirkpatrick's award-winning book, *Romancing the Rain*. Shot over nine years in the jungles of the Peruvian Amazon, they feature brilliant tropical birds, colorful poison dart frogs, venomous snakes, playful monkeys, exotic mammals, vibrant jungle flowers, breathtaking rainforest landscapes, and panoramic shots of the mighty Amazon River.

"The Amazon is the most challenging place I've ever worked," Kirkpatrick says. "I've tried to capture not only the flora and fauna of the rainforest, but also a sense of the incredible adventure found there."

The Amazon rainforest is the world's largest continuous tropical rainforest, comprising more than one-half of all the remaining rainforest area on earth. It is also home to the world's largest collection of living plant and animal species. These plants and animals are in danger, however, since more than 27 million acres of tropical rainforest habitat disappear each year. At this rate, all rainforests could disappear within 50 years.

This exhibit affords the viewer an intimate look at one man's personal experiences in one of the world's rarest, most important, and most endangered habitats.

*"The Amazon
is the most challenging place
I've ever worked."*

—STEPHEN KIRKPATRICK—

An opening reception at 6:00PM on Friday, February 3 will include a book signing and a multimedia presentation by Kirkpatrick in the Museum's Rotwein Theater. The exhibit opens to the general public on Saturday, February 4, and will run through May.

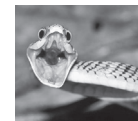


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MISSISSIPPI Museum of Natural Science

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WILDLIFE, FISHERIES AND PARKS

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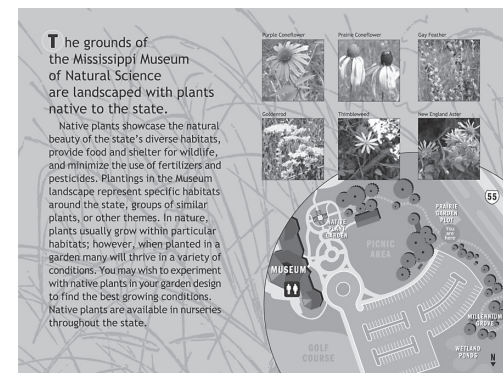


After almost six years using the familiar, oversized design for *The Natural NEWSLINE*, we decided that a new look was needed. Discussions with several Museum members produced excellent suggestions regarding the size, shape, and organization of information. Of course, I was also interested in a design that was more economical to produce.

I believe the new design will help readers take even greater advantage of the Museum's services. I hope you enjoy the new *NEWSLINE*, and I welcome your comments on the content and new format.

With the hurricane debris finally cleaned up, the Museum staff is now involved in assessing the long range environmental changes resulting from Katrina. We extend our deepest sympathy to all our friends on the Gulf Coast as they rebuild their lives and their institutions.

As I turn my attention to next summer's exhibit, I think *Giant Insects* will be every bit as exciting as *A T.Rex Named Sue* was last summer. Individuals or corporations who want to help support this exhibit should let me know soon. We will also need lots of great volunteers for both *Lost in the Amazon* this spring and for *Giant Insects* in the summer.



The grounds of the Mississippi Museum of Natural Science are landscaped with plants native to the state. Native plants showcase the natural beauty of the state's diverse habitats, provide food and shelter for wildlife, and minimize the use of fertilizers and pesticides. Plantings in the Museum landscape represent specific habitats around the state, groups of similar plants, or other themes. In nature, plants usually grow within particular habitats; however, when planted in a garden many will thrive in a variety of conditions. You may wish to experiment with native plants in your garden design to find the best growing conditions. Native plants are available in nurseries throughout the state.

You will find new signs in our Native Plant Garden to help you identify individual plants and discover the interdependency between different plant species. We hope this information will give visitors a better understanding of how native plants can be used in an urban environment.

Once again, I hope you enjoy the new design of *NEWSLINE*, and I look forward to seeing you soon as we all get Lost in the Amazon!

Libby Hartfield
Libby Hartfield
MUSEUM DIRECTOR



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

NEW STAFF



Angel Rohnke

Angel Rohnke has joined the Museum staff as a naturalist in our education department. Angel comes to us from Cranberry Lake Biological Station in the Adirondack Mountains where she served as Business Manager. Previously she worked as a Park Guide/Interpreter at the Women's Rights National Historical Park and in various capacities in Fisheries & Education for the New York State Department of Environmental Conservation. Educated at the SUNY College of Environmental Science and Forestry in Syracuse, NY, Angel holds a B.S. in Environmental Forest Biology and a Master of Professional Studies in Environmental Interpretation.



Nicole Smith

Nicole Smith is going wild—Project WILD to be exact. As a new naturalist on staff, Nicole will work to connect people with nature through direct involvement with the Project WILD curricula and innovative museum programming. Before coming to the Museum, Nicole lead environmental education programs at Ruffner Mountain Nature Center and the after-school program at The McWane Center in Birmingham, AL. Nicole holds a B.S. degree from Auburn University in Anthropology/Geology and has more than five years experience in environmental education.

Got FISH?

Do you like to fish? Whether you are a serious angler or a novice, *Got FISH?* has a seminar for you.



On Saturday, February 4, Bobby Cleveland, Outdoors Editor for *The Clarion-Ledger*, will host three panel discussions with some of Mississippi's finest crappie, bass, bream, and catfish anglers. The bass seminar will take place from 9:00 to 10:00AM; the catfish/bream seminar will follow



from 10:10 to 11:10AM; and the crappie session from 11:20AM to 12:30PM will conclude the seminars. The scope and content of each seminar will be guided by questions from the audience. Our panel of experts will share knowledge not only about specific fish species, but also about successful techniques, favorite lures, and even those much coveted fishing spots.

Something's Fishy

From NOON to 3:00PM children and families can enjoy *Something's Fishy*. Activities include interactive fish feedings and behind-the-scenes tours of the aquariums.



Got FISH? has something for everyone. Mark your calendar for February 4!

SPECIAL EVENTS

QUICK CALENDAR

GOT FISH? & Something's Fishy
SAT - FEB 4
9:00AM to 3:00PM

Nature FEST
SAT - APR 8
10:00AM to 3:00PM

International Migratory Bird Day
SAT - MAY 13
10:00AM to 3:00PM

and research area. Meet the scientists and learn about some of the unique tools they use in their research. Take a tour of the Museum Collections area and discover how these valuable specimens are collected and maintained.



Botanists and volunteers will conduct guided tours of the nature trails. The Native Plant Gardens will be in full bloom, offering a spectacular display of native plants in their springtime glory.



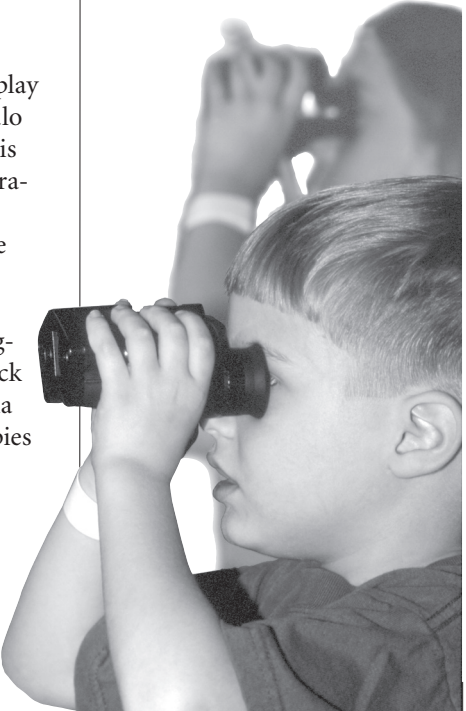
The latest in outdoor recreational supplies and equipment will be on display by various vendors. Buffalo Peak will join us again this year with kayak demonstrations.

In connection with the *Lost in the Amazon* photography exhibit, renowned wildlife photographer Stephen Kirkpatrick will conduct a multimedia presentation and sign copies of his award-winning coffee table book *Romancing the Rain*. See you at the Museum for *Nature FEST* on April 8!

International Migratory Bird Day

Celebrate the incredible journeys of migratory birds. Join the Museum and Partners in Flight as they host International Migratory Bird Day on Saturday, May 13, from 10:00AM to 3:00PM.

Bird watching, nature hikes, and lots of hands-on activities will encourage conservation and increase our awareness of birds. Did you know the Museum's grounds and nature trails offer stopover spots needed by migratory birds during their long flights? Join us on May 13 to welcome our feathered travelers!



From Idea to Diorama



A museum's permanent exhibits are its backbone. They announce the museum's mission and give substance to its public message.

Ten of the permanent dioramas at the Mississippi Museum of Natural Science depict particular habitats unique to Mississippi. They were designed to visually reflect the Museum's mission: 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 Museum staff spent more than three years planning, researching, designing, and overseeing production of these dioramas. Why was so much time required to put together a few nature scenes? Deciding which of the state's many diverse habitats should be represented required considerable research and consultation. The Museum's scientific, education, and exhibit staff worked together to ensure that each diorama contained correct biological information, an appropriate educational message, and dramatic visual interest.

Site visits were made to actual areas depicted in the dioramas, volumes and volumes of photographs were taken, and plant specimens were

collected and prepared for shipment to an exhibit fabrication firm. Exhibit specialists then color matched and dismantled the plants, made molds of individual leaves and petals, then assembled and painted the molded plants and flowers, readying them for installation.

Animal specimens were carefully chosen from the Museum's collections and prepared for specific dioramas. Prior knowledge of each animal's eventual placement in the diorama was important so that each specimen could be mounted in a realistic manner. Taxidermy preparation was often a challenge because of the size and type of specimens.

A collaborative team of staff members from Museum research, education, and administration undertook the considerable task of public interpretation of the dioramas. With so much that could be shared about the components of each habitat, the interpretative team was charged with determining the most important information and reducing it to a concise, easily understood statement for each diorama.



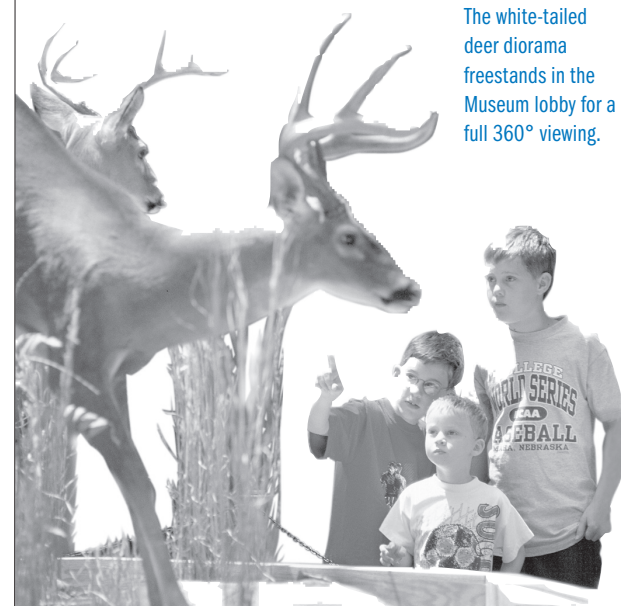
Finally, all the individual details of the diorama were assembled and an appropriate framework was established for each specific habitat. The exhibits staff, working in cooperation with a professional exhibit firm and the Museum's research and education staff, set about the exciting and painstaking task of creating spectacularly realistic representations of nature in a confined area. During this phase, every decision — from the placement of each individual specimen to the perfect lighting of each detail — was crucial to the finished design.



After three years of planning and two years of construction, the dioramas were finished and ready for public viewing. But that's not the end of the story. The dioramas require a consistent schedule of pest control as well as daily checks for lighting needs, routine cleaning, and general upkeep.

When one considers all that went into making the Museum's dioramas, it is clear why they are considered *permanent* exhibits. Our dioramas represent a sizeable investment of both time and money. Preserving that investment is crucial.

Individual dioramas will be explored in more detail in upcoming issues of *Natural Newsline*.



The white-tailed deer diorama freestands in the Museum lobby for a full 360° viewing.

(Re)collecting Fannye Cook

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.

As the official repository for specimens collected during scientific studies and faunal surveys in the state, these collections house over 700,000 specimens, making it the largest single reference for Mississippi vertebrate animals and freshwater mussels in existence.



Most of these collections have their origins in the mid-1930's when Fannye Cook, the museum's first director, sought to document the flora and fauna of Mississippi through a statewide Plant and Animal Survey. Drawing on skills acquired as a museum worker at the Smithsonian Institution and backed by federal funding from the Works Progress Administration, Cook established 18 satellite museums around the state and trained field collectors in the methods of collecting and preparing museum specimens.



The Museum's collections house over 700,000 specimens, making it the largest single reference for Mississippi vertebrate animals and freshwater mussels in existence.



Between 1936 and 1941, thousands of specimens of birds, mammals, fishes, amphibians, reptiles, mollusks, and other life forms were collected, catalogued, and curated. This work became the basis for a number of Cook's scientific publications such as *Freshwater Fishes of Mississippi* and *Snakes of Mississippi*. Cook's own work was said to rival that of the United States Biological Survey. The Survey had previously conducted extensive research on flora and fauna throughout the United States, utilizing Cook as a consultant for species identifications.

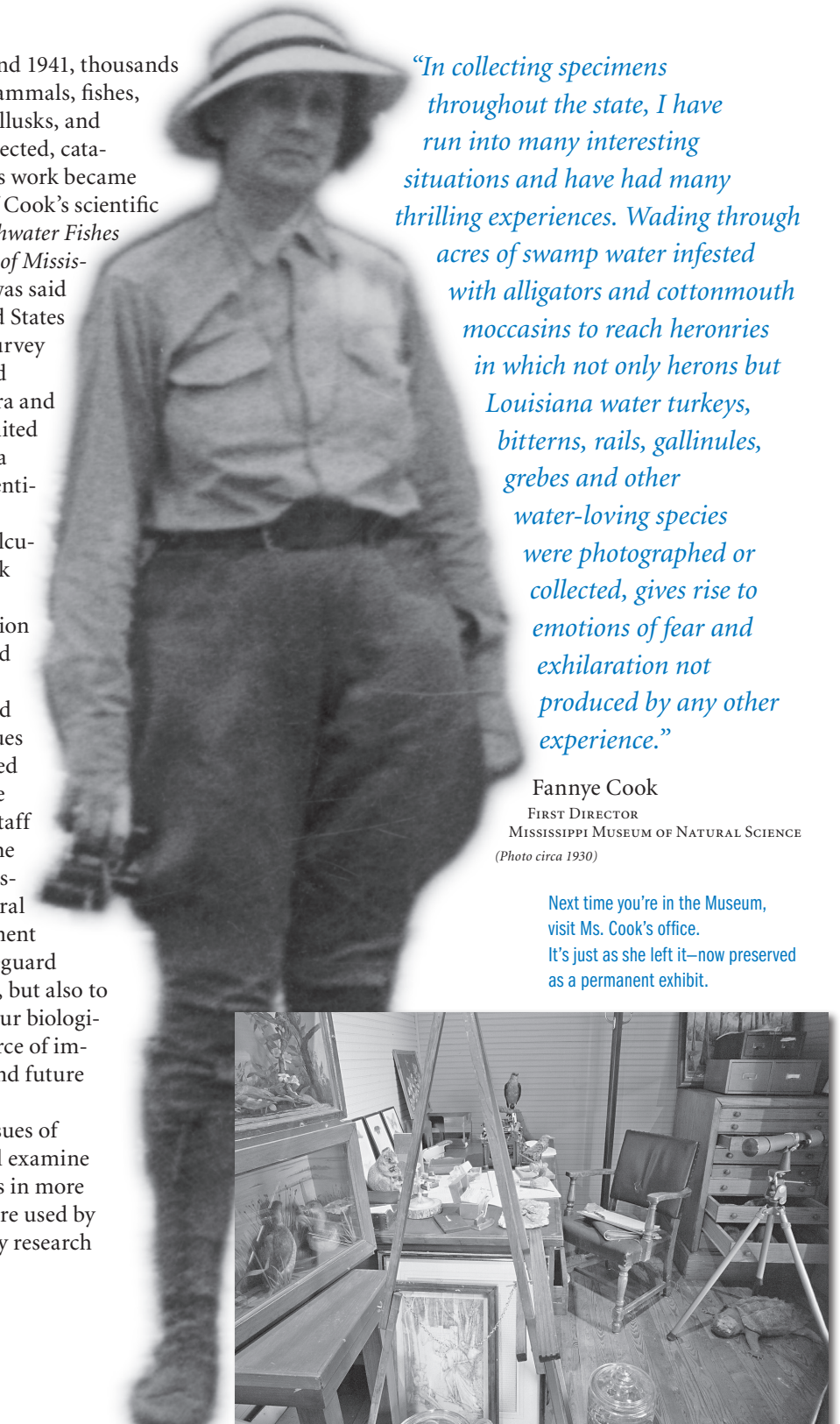
We owe an incalculable debt to Fannye Cook who 70 years ago had the foresight and determination to document the flora and fauna of our state. Most of the specimens collected by Cook and her colleagues remain carefully preserved in our collections and are used today by Museum staff and other researchers. The administration of the Mississippi Museum of Natural Science made a commitment years ago not only to safeguard these historic collections, but also to continue to build upon our biological collections as a resource of immense value to present and future scientists.

In upcoming issues of *Natural Newsline*, we will examine the individual collections in more detail and see how they are used by our Conservation Biology research staff and others.

"In collecting specimens throughout the state, I have run into many interesting situations and have had many thrilling experiences. Wading through acres of swamp water infested with alligators and cottonmouth moccasins to reach heronries in which not only herons but Louisiana water turkeys, bitterns, rails, gallinules, grebes and other water-loving species were photographed or collected, gives rise to emotions of fear and exhilaration not produced by any other experience."

Fannye Cook
FIRST DIRECTOR
MISSISSIPPI MUSEUM OF NATURAL SCIENCE
(Photo circa 1930)

Next time you're in the Museum, visit Ms. Cook's office. It's just as she left it—now preserved as a permanent exhibit.



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 1:00PM 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 10:00AM and 2:00PM, Creature Features make learning fun!

Fish Feeding

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

Come On Outside!

As the days grow longer and temperatures get warmer, the Museum's Native Plant Garden undergoes a dramatic transformation from the drabness of winter to the spectacular colors of spring. Now when you visit the Garden to experience the magic of spring, you'll find new signs in place identifying many of the different plants. So come on outside and discover the rich variety of Mississippi flora!

JAN 7 · SAT · 10AM & 2PM
Creature Feature
You never know what you'll find...

JAN 14 · SAT · 10AM & 2PM
Creature Feature
All learning should be such fun!

JAN 21 · SAT · 10AM & 2PM
Creature Feature
Here's something you didn't know...

JAN 28 · SAT · 10AM & 2PM
Creature Feature
Can you guess what it will be?

FEB 1 · WED
Camp WILD Registration
Registration for the June camp opens for Foundation Members only (*Registration opens for general public March 1.*)

FEB 3 · FRI · 6PM · EXHIBIT PREMIERE
Lost In The Amazon
Opening reception, book signing and multimedia presentation by photographer Stephen Kirkpatrick.



FEB 4 · SAT · TRAVELING EXHIBIT
Lost In The Amazon
Exhibit opens to the public. (*see page 1*)



FEB 4 · SAT · 9AM - 3PM · EVENT
Got Fish?
Bobby Cleveland, Outdoors Editor for *The Clarion-Ledger*, will moderate three fishing seminars for seasoned anglers as well as beginning fishermen. Other activities include **Something's Fishy**, with fish feedings by live divers and a behind-the-scenes look at the Museum aquariums. (*see page 3*)

FEB 7 · TUE · NOON-1PM · LECTURE
Ice Age Fossil Hunting: Lower Mississippi River Gravel Bars

SPEAKER: Lonnie Looper, Antiquities Replicator, Greenville, MS
Lonnie and his wife Freida have collected hundreds of 10,000- to 7,000-year old Ice Age fossil bones in the Mississippi Delta and Yazoo Basin. These treasures were found by walking gravel bars in the Mississippi-Arkansas border during seasonal low water. Join Lonnie as he shares the fossil finding techniques that led to such rare discoveries as a Great Short-faced Bear jaw and a Manatee arm bone. Lonnie will also share his site information along the Mighty Mississippi, as well as his knowledge of replicating fossil finds.

FEB 11 · SAT · 10AM & 2PM
Creature Feature
This one you'll never forget!

FEB 18 · SAT · 10AM & 2PM
Creature Feature
It's a jungle out there!

FEB 25 · SAT · 10AM & 2PM
Creature Feature
Think you've seen it all?

MAR 1 · WED
Camp WILD Registration
Registration for the June camp opens to the general public through March 28.

MAR 4 · SAT · 10AM & 2PM
Creature Feature
Meet a new critter!



MAR 7 · TUE · NOON-1PM · LECTURE
Using Global Positioning to Protect the Endangered African Mountain Gorilla from Disease

SPEAKER: Rich Minnis, Assistant Research Professor, Department of Wildlife and Fisheries, Mississippi State University
Research suggests that the highly endangered African Mountain Gorilla is catching diseases from tourists in the Virunga Mountains and Vwindi Impenetrable

National Park. Scientists suspect that transmission of human diseases to apes is a major threat to species survival. To help protect them, researchers are using electronic tracking systems to determine when and where the gorillas make contact with humans and domestic animals. MSU research efforts are focused on collecting and analyzing information to develop a web-based health/disease monitoring system that will ensure the long-term survival of the species.

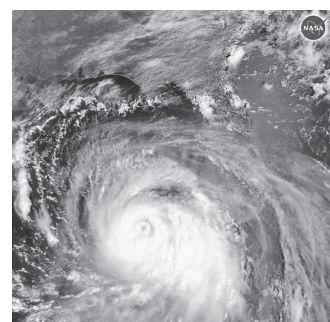
MAR 11 · SAT · 10AM & 2PM
Creature Feature
Now this is really something...

MAR 15 · WED
Junior Duck Stamp Art Competition
Entries due today.

MAR 18 · SAT · 10AM & 2PM
Creature Feature
Not a creature you see every day...

MAR 25 · SAT · 10AM & 2PM
Creature Feature
Ready to be surprised?

APR 1 · SAT · 10AM & 2PM
Creature Feature
That's just cool!



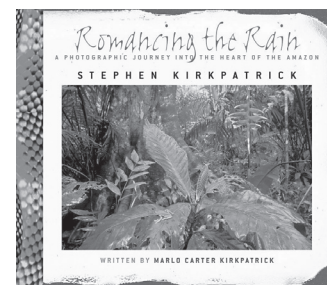
APR 4 · TUE · NOON-1PM · LECTURE
Mitch, Katrina, and the Human Geography of Hurricanes

SPEAKER: Mark Bonta, Ph.D., Assistant Professor of Geography, Division of Social Sciences, Delta State University
Hurricanes Mitch (1998) and Katrina (2005) were the most devastating New World hurricanes in recent history. These two "super storms" underscored modern humanity's woeful lack of adaptation to the forces of nature. What, if anything, have we learned from these experiences? Dr. Bonta's doctoral research at Louisiana State University centered on the effects of Hurricane Mitch on his study area of Honduras. The author of three books and several articles on Honduras, Dr. Bonta also leads birding tours of that country.



APR 8 · SAT · 10AM-3PM · FESTIVAL
Nature FEST

Bring the family for a fun celebration of nature! Activities include programs about snakes and birds of prey, fish feedings, a behind-the-scenes look at Museum research, guided nature walks and many other outdoor activities. (*see page 3*)



APR 8 · SAT · 3PM · BOOK SIGNING
Lost In The Amazon
Photographer Stephen Kirkpatrick will present a multimedia show and sign copies of his book *Romancing the Rain*, the source of the great photos in our "Lost in the Amazon" exhibit.

APR 15 · SAT · 10AM & 2PM
Creature Feature
Bet you didn't know this one...

APR 22 · SAT · 10AM & 2PM
Creature Feature
You never know what we'll bring!

APR 29 · SAT · 10AM & 2PM
Creature Feature
What can this creature teach us?



MAY 2 · TUE · NOON-1PM · LECTURE
The Early History of the Natchez Trace

SPEAKER: Prentiss G. Cox, Ph.D., Professor Emeritus of Biology at Mississippi College & President of the Clinton Community Nature Center Association
Although its role as a major highway for commerce and travel lasted only about 30 years, the Natchez Trace is today a celebrated part of Mississippi history and folklore. Dr. Cox will discuss how the Trace came into existence and how the exploits of heroes and outlaws made them, and the Trace itself, legendary.

MAY 6 · SAT · 10AM & 2PM
Creature Feature
It's a wild, wild, wild world...



MAY 13 · SAT · 10AM - 3PM · EVENT
International Migratory Bird Day

Join in activities to support conservation and increase our awareness of migratory birds. (*see page 3*)

MAY 20 · SAT · 10AM & 2PM
Creature Feature
Enter this creature's world...

MAY 27 · SAT · 10AM & 2PM
Creature Feature
Up close and personal!

MAY 28 · SUN · TRAVELING EXHIBIT
Lost In The Amazon
Exhibit Closes

JUN 17- SEP 8 · TRAVELING EXHIBIT
Giant Insects
Insects of giant proportions will give viewers a new perspective as they explore these amazing creatures at 40 to 120 times life size.



This season consider the Migratory Bird Kit or Mammal Kit (shown above) to create interest.

PRESCHOOL

The Museum's hands-on Preschool
Discovery Room

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



VISITOR ACCESS
ALL AGES

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

TIME FOR TWOS
(AGES 2 & UNDER)

2nd TUE 1:00-4:00PM

STORY TIME
(AGES 3 TO 5)

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

RESERVED GROUP ACCESS
JAN/FEB CLASSES

Where Shall We Spend the Winter?

Some migrate, some hibernate, some just hang around home. Learn about the diverse winter habitats where animals spend the winter.

MAR/APR 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.

To reserve a class time, call Joan Elder
601.354.7303 ext. 136.

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

Do you need CEU Credits? The Museum staff provides training in two internationally recognized environmental education programs, **Project WILD** and **Project WET**. Teacher Workshops can be conducted at your school or at the Museum. Each workshop is six hours long with a fee of \$10 per person. CEU credits for the programs are available from Mississippi College for an additional fee. To schedule a workshop, call the Project WILD or Project WET Coordinator.

We Know Benchmarks

Museum resources can help teachers meet benchmarks, competencies, and teaching objectives.

Call 601.354.7303

for information, reservations & resources

At Home in Mississippi and the Amazon



The Amazon River and Amazon basin are home to so many exotic species of plants and animals that biologists have yet to classify them all. Many of these species are unique to the Amazon, existing nowhere else in the world. One common Amazon species, however, is familiar to most Mississippians. In fact, you probably see this species in your own neighborhood each summer.

The purple martin, North America's largest swallow, is a neo-tropical migratory bird. Purple martins spend the winter in South America and return to North America for summer breeding. The older martins generally arrive first to claim nest sites they have previously used. The males fiercely defend these preferred sites. New breeders usually arrive a few weeks later. You can expect to see the first of the purple martins returning to Mississippi in February or March.

Purple martins are "colonial cavity nesters," meaning they use protective enclosures to build nests. Prior to the arrival of Europeans on this continent, Native Americans used empty gourds to attract the martins. Today in the eastern United States, purple martins rely almost exclusively on nest boxes or birdhouse apartments that bird lovers provide. Out west the martins still tend to take advantage of natural crevices such as woodpecker holes, other

holes they find in trees, or rock outcroppings.

Purple martins eat on the wing, catching their prey as they swoop through the air. Dragonflies, wasps, damselflies and mosquitoes are some of the favorite dishes of these insectivores. Martins are also known to eat their young's empty eggshells, a wonderful source of calcium. These aerial acrobats have also managed to become skillful drinkers on the wing. They use their lower bill to scoop water as they fly over rivers, ponds, and other water sources. Don't expect to see them relaxing at a birdbath.

During August and September the purple martins will begin their trek southward. They congregate in large groups and then migrate to Brazil and other places in South America where insects are plentiful. During the winter they will molt and put on a new suit of feathers in preparation for their spring journey back to North America.

Amazon basin by Stephen Kirkpatrick. Martin house courtesy USDWF.



A Perilous Journey

It's nearing that time of year when millions of neo-tropical migratory birds make their annual migration from Central and South America to the United States and Canada, taking advantage of abundant food resources and nesting sites. The season's longer days also allow more time for birds to find food and feed their young. Some birds migrate by day and others by night. They use cues such as the sun, stars, landmarks, and the earth's magnetic field to help find their way.

Conservationists are concerned about the survival of many migratory bird species. The largest cause for declines is the loss of habitat. Whether they breed here or are stopping by on their way farther north, migratory birds use all kinds of habitats in Mississippi, from mature forests to scrubby and open places. Forested floodplains along the Pascagoula, Pearl, and Mississippi River systems are especially important since they provide corridors that

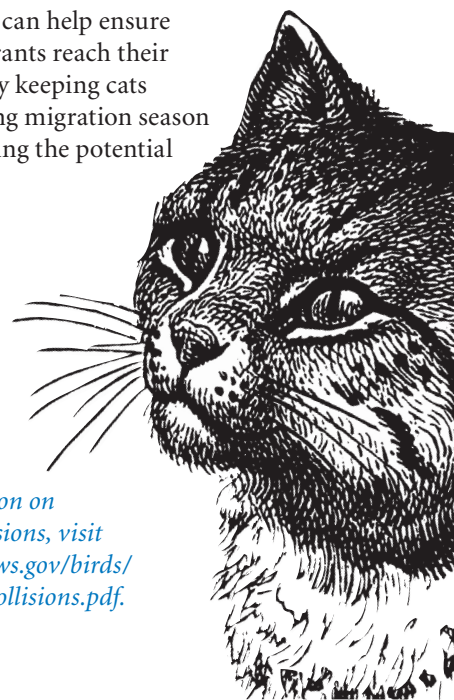
concentrate migrating birds as they travel through the state. Many species may be heard and seen from the Museum nature trails as they make their way along the Pearl River through Jackson.

The largest cause for decline in migratory bird populations is loss of habitat.

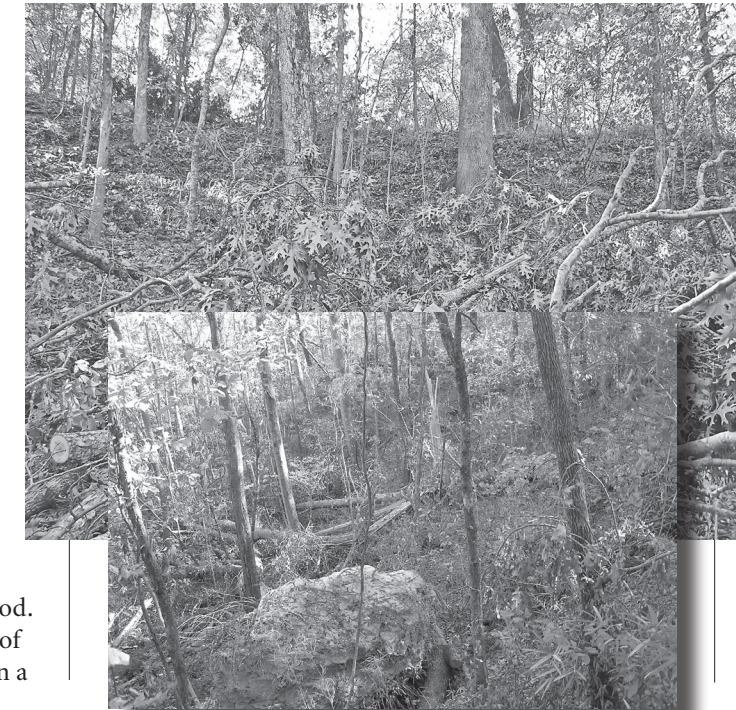
This long, dangerous migration requires tremendous energy. The ruby-throated hummingbird will gorge itself on insects and nectar before starting the journey. This tiny bird, which weighs less than a penny, must have enough energy to fly 600 miles non-stop across the Gulf of Mexico. After crossing the Gulf, biologists estimate that more than 700 million birds die each year from collisions with power lines, communication towers, windows, and wind turbines. Outdoor cats kill millions each year as well.

You can help ensure that our migrants reach their destination by keeping cats indoors during migration season and by reducing the potential for collisions.

For information on reducing collisions, visit <http://www.fws.gov/birds/documents/Collisions.pdf>.



Katrina's Trails



Visitors to our trails this winter and spring will find the forest altered somewhat by Hurricane Katrina. Falling trees damaged two areas of our boardwalk. These portions of the trail were closed for some time to rebuild.

Overall the forest had little damage, but Katrina's strong winds created some new forest gaps. Gaps are openings in the canopy, which may be small when formed by the loss of branches or large when caused by the fall of entire trees. Other than clearing the debris from the walking trails, our policy is to leave fallen trees in place. By doing so, the trees are allowed to return their nutrients to the forest as they decay. Various organisms assist in this process, including bacteria, fungi, and insects. These organisms devour the tree from the outside and from within, making pulp of the once strong wood.

Forest gaps allow for a greater diversity of animals in the area. The decaying wood brings in a

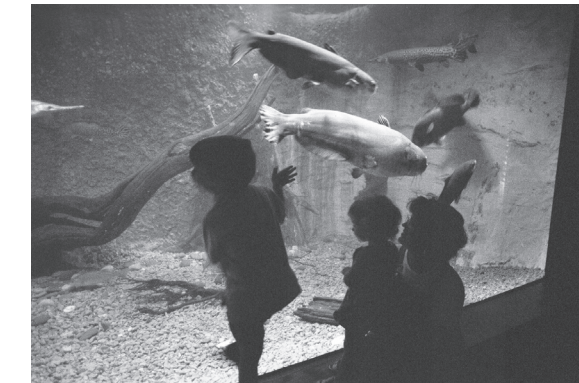
large population of insects, which then become food for larger animals. Gaps provide openings allowing animals to feed on the new vegetation, then to escape back into the shelter of the forest when necessary.

Gaps develop different ecological characteristics than the surrounding forest. They are usually brighter and warmer due to the increased amount of sunlight. Additionally, the soil composition may be changed slightly as deep soil is carried to the surface by uprooted trees. Plant species that need sunny areas for their seeds to germinate will now have an opportunity to grow. Initially the gaps may have a wildflower bloom in the spring, followed by vines like blackberries and catbriers. Soon tree seedlings of sweetgum, ash, oak, and tulip tree will begin growing. These species grow rapidly (in terms of tree life spans) and within about ten years the gap will again be filled.

The Pearl: In Nature and Under Glass

From its source in the Tombigbee National Forest in Choctaw County, the Pearl River flows past Jackson, Monticello, Columbia, Picayune and many other towns and communities on its winding, southerly course to the Gulf of Mexico.

The Pearl, which got its name from early explorers who found pearls in mussels on the river bottom, is still inhabited by several types of freshwater mussels. The Pearl is also populated by many species of fish, reptiles and other animals, some of which are endangered. Endangered ringed map turtles are found only in the Pearl and may be seen basking on logs from the Museum's lower nature trail. Gulf sturgeon periodically migrate up the Pearl River to spawn before returning to the salt water of the Mississippi Sound. Sturgeon exceeding six feet in length have been accidentally

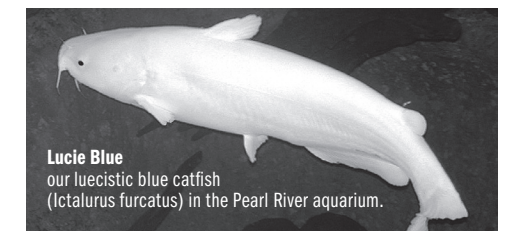


caught by fishermen as far upstream as the Ross Barnett Reservoir spillway.

The Museum's Pearl River aquarium presents life under the surface of this river. Special effort was made not only to include species that naturally occur in the Pearl, but also to accurately depict this underwater river environment from a fish's point of view. This aquarium is home to several large fish

that can be found in the river. A few of our prizes are the alligator gar, longnose gar, freshwater drum, and buffalo fish. Popular game fish may also be seen in this tank.

One special resident is "Lucie Blue," our enormous white catfish. Lucie is short for *lucestic*, meaning that she lacks pigmentation, and blue is for the type of catfish that she is, a blue catfish (*Ictalurus furcatus*). When she was placed in the aquarium Lucie Blue weighed 67 pounds. How much do you think she weighs now? Be honest, we all know how fishermen exaggerate!



Lucie Blue
our *lucestic* blue catfish
(*Ictalurus furcatus*) in the Pearl River aquarium.

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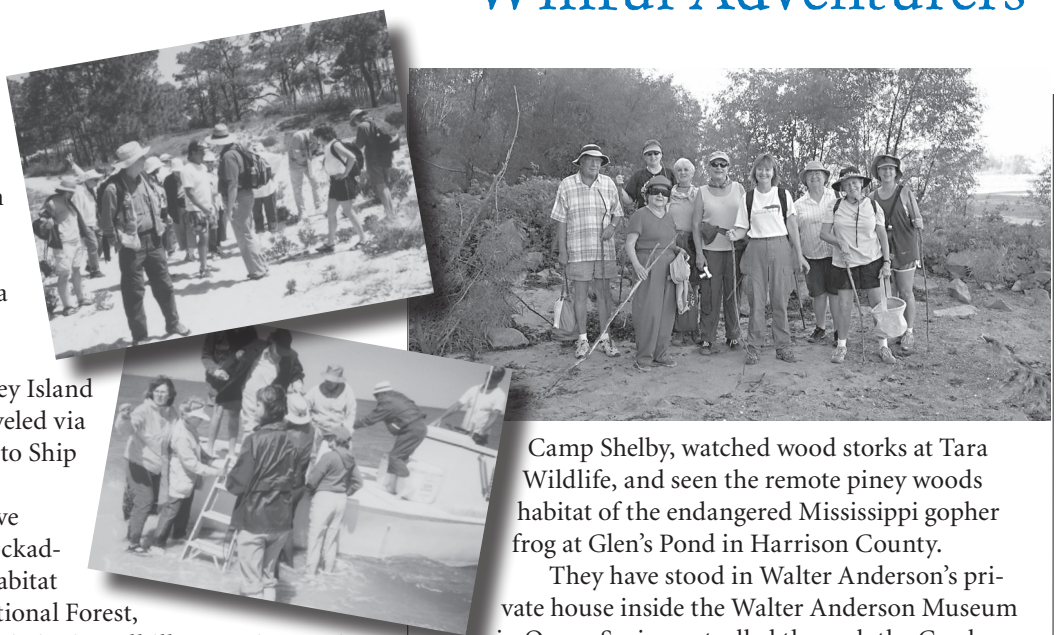
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Willful Adventurers

They sailed on a Biloxi oyster schooner to Horn Island, voyaged on a charter boat up the Pascagoula River, motored by pontoon boat through the Honey Island Swamps, and traveled via a passenger ferry to Ship Island.

They have visited the red-cockaded woodpecker habitat in the Desoto National Forest, glimpsed the Mississippi sandhill cranes in Gautier, viewed gopher tortoise holes and pitcher plants at



Camp Shelby, watched wood storks at Tara Wildlife, and seen the remote piney woods habitat of the endangered Mississippi gopher frog at Glen’s Pond in Harrison County.

They have stood in Walter Anderson’s private house inside the Walter Anderson Museum in Ocean Springs, strolled through the Crosby Arboretum, traveled up the Natchez Trace to see

the flora and fauna of Tishomingo State Park, and in their latest adventure, traveled to the Mississippi River’s Rosedale sandbar in the Great River Road State Park to become amateur paleontologists, finding fossils and rocks.

And along the way they learned, ate, discovered, snacked, talked, hiked, lunched, photographed, enjoyed each other’s company, and swapped marvelous stories of where they come have from, what they’ve done, and places they’ve visited.

These travelers are some of the Museum’s most faithful supporters — the Museum Volunteers. These fun-filled field trips are an important learning tool in the Museum’s mission to promote understanding and appreciation of Mississippi’s biological diversity. To become part of this adventuresome group and join us on future outings, contact the Museum at 601-354-7303.

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

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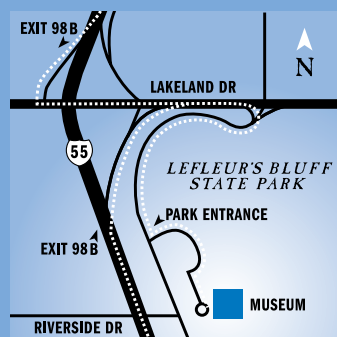
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