



## Mississippi

# Federally Threatened and Endangered Species Consultation Information

U.S. Fish and Wildlife Service Interior Region 4 – Mississippi Basin Mississippi Ecological Services Field Office Jackson, Mississippi

January 31, 2025

## TABLE OF CONTENTS

Information for Planning and Consultation	
How to Submit Projects for Consultation	
Conservation Planning Assistance Contacts by County Federally Threatened and Endangered Species of Mississippi	
Species in Mississippi No Longer Protected Under the ESA	
Federally Threatened and Endangered Species and Habitat Descriptions	
PLANTS	7
Louisiana Quillwort	7
Pondberry	7
Price's Potato-bean	7
Tennessee Yellow-eyed Grass	8
MUSSELS	8
Cumberlandian Combshell	9
Oyster Mussel	9
Southern Combshell	9
Snuffbox	9
Longsolid	9
Orangenacre Mucket	10
Alabama Lampmussel	10
Alabama Moccasinshell	10
Cumberland Moccasinshell	10
Alabama Hickorynut	11
Undescribed Hickorynut	11
Sheepnose Mussel	11
Black Clubshell	11
Southern Clubshell	11
Ovate Clubshell	12
Louisiana Pigtoe	12
Heavy Pigtoe	12
Tennessee Pigtoe	12
Slabside Pearlymussel	12
Fat Pocketbook	13
Inflated Heelsplitter	13

Rabbitsfoot1	3
INSECTS	3
Mitchell's Satyr Butterfly1	3
Monarch Butterfly14	4
FISHES14	4
Bayou Darter14	4
Gulf Sturgeon14	4
Pallid Sturgeon1	5
Pearl Darter1	5
AMPHIBIANS	5
Dusky Gopher Frog1	5
Eastern Hellbender1	5
REPTILES1	6
Alabama Red-bellied Turtle10	6
Alligator Snapping Turtle10	6
Black Pinesnake10	6
Eastern Indigo Snake1	7
Gopher Tortoise (Western Distinct Population Segment)1	7
Pearl River Map Turtle	7
Ringed Map Turtle1	7
Sea Turtles: Green, Hawksbill, Kemp's Ridley, Leatherback, and Loggerhead1	8
Yellow-blotched Map Turtle18	8
BIRDS1	8
Eastern Black Rail	8
Mississippi Sandhill Crane1	8
Piping Plover	9
Red-cockaded Woodpecker19	9
Rufa Red Knot19	9
Whooping Crane	0
MAMMALS	0
Gray Bat20	0
Indiana Bat20	0
Northern Long-eared Bat20	0

Tricolored Bat	21
Federally Threatened and Endangered Species by County	
Adams County	
Alcorn County	
Amite County	23
Attala County	24
Benton County	24
Bolivar County	24
Calhoun County	25
Carroll County	25
Chickasaw County	25
Choctaw County	26
Claiborne County	26
Clarke County	27
Clay County	27
Coahoma County	27
Copiah County	28
Covington County	28
DeSoto County	29
Forrest County	29
Franklin County	30
George County	
Greene County	31
Grenada County	31
Hancock County	32
Harrison County	
Hinds County	34
Holmes County	34
Humphreys County	35
Issaquena County	35
Itawamba County	36
Jackson County	37
Jasper County	

Jefferson County	
Jefferson Davis County	
Jones County	
Kemper County	
Lafayette County	
Lamar County	
Lauderdale County	
Lawrence County	41
Leake County	
Lee County	
Leflore County	
Lincoln County	
Lowndes County	
Madison County	
Marion County	
Marshall County	45
Monroe County	45
Montgomery County	
Neshoba County	
Newton County	
Noxubee County	
Oktibbeha County	
Panola County	
Pearl River County	
Perry County	
Pike County	
Pontotoc County	
Prentiss County	
Quitman County	
Rankin County	51
Scott County	51
Sharkey County	
Simpson County	52

Smith County	53
Stone County	53
Sunflower County	54
Tallahatchie County	54
Tate County	54
Tippah County	55
Tunica County	57
Union County	57
Walthall County	
Warren County	
Washington County	
Wayne County	
Webster County	
Wilkinson County	
Winston County	60
Yalobusha County	60
Yazoo County	60

## INFORMATION FOR PLANNING AND CONSULTATION

Section 7 of the Endangered Species Act (ESA) requires all Federal agencies to ensure that any actions authorized, funded, or carried out, do not jeopardize the existence of listed species or adversely modify critical habitat. This document provides an overview of at-risk species, federally listed and proposed for listing species, critical habitats, and county distributions of federally listed and proposed for listing species found in Mississippi. Additionally, we have provided optimal survey timeframes for these species should a survey be required for your project. For all federally funded projects, which require Section 7 consultation under the ESA, we encourage the use of our Information for Planning and Consultation (IPaC) website. The IPaC website helps streamline the environmental review process by identifying threatened and endangered species, critical habitats, migratory birds, and other natural resources that may be impacted by your project. This site also provides up-front analysis (i.e. determination keys) for certain project types, where federally agencies and/or applicants can instantly assess impacts to the species and determine whether further consultation is required by our office. The following determination keys are available:

- Clearance to Proceed with Federally-insured Loan and Grant Project Requests,
- FHWA, FRA, FTA Programmatic Consultation for Transportation Projects affecting Northern Long-eared Bat or Indiana Bat, and the
- Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key

Finally, additional streamlining processes are constantly being added to this site, including a consultation package builder that provides an interactive, step-by-step process to help prepare a Biological Assessment should one be needed.

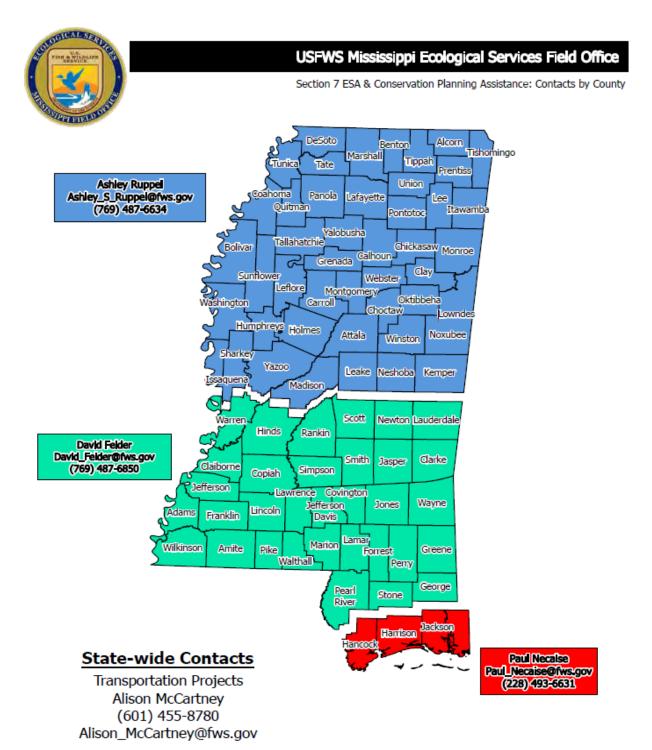
## HOW TO SUBMIT PROJECTS FOR CONSULTATION

The preferred method for submitting your projects is electronically through our official consultation email address: <u>msfosection7consultation@fws.gov</u>.

Projects also may be submitted to our physical mailing address:

U.S. Fish and Wildlife Service Mississippi Ecological Services Field Office 6578 Dogwood View Parkway Jackson, MS 39213

## CONSERVATION PLANNING ASSISTANCE CONTACTS BY COUNTY



## FEDERALLY THREATENED AND ENDANGERED SPECIES OF MISSISSIPPI

#### E = Endangered; T = Threatened; PE = Proposed Endangered; PT = Proposed Threatened H = Historic or Extirpated; CH = Critical Habitat; PCH = Proposed Critical Habitat

Common Name	Scientific Name	Status
Plants (7)		
Price's Potato-bean	Apios priceana	Т
Whorled Sunflower	Helianthus verticillatus	E
Louisiana Quillwort	Isoetes louisianensis	E
Pondberry	Lindera melissifolia	E
White Fringeless Orchid	Platanthera integrilabia	Т
Tennessee Yellow-eyed Grass	Xyris tennesseensis	E
American Chaffseed	Schwalbea americana	H (E)
<u>Mussels (24)</u>		
Cumberlandian Combshell	Epioblasma brevidens	E/CH
Oyster Mussel	Epioblasma capsaeformis	E/CH <sup>1</sup>
Southern Combshell	Epioblasma penita	E/PCH
Snuffbox	Epioblasma triquetra	E
Longsolid	Fusconaia subrotunda	Т
Pink Mucket	Lampsilis abrupta	E
Orangenacre Mucket	Lampsilis (=Hamiota) perovalis	T/CH
Alabama Lampmussel	Lampsilis virescens	E
Alabama Moccasinshell	Medionidus acutissimus	T/CH
Cumberland Moccasinshell	Medionidus conradicus	PE
Round Hickorynut	Obovaria subrotunda	T/CH
Alabama Hickorynut	Obovaria unicolor	PE
Undescribed Hickorynut	Obovaria cf. unicolor	РТ
Sheepnose Mussel	Plethobasus cyphyus	E/PCH
Black Clubshell	Pleurobema curtum	E
Southern Clubshell	Pleurobema decisum	E/CH
Ovate Clubshell	Pleurobema perovatum	T/CH
Louisiana Pigtoe	Pleurobema riddellii	PT/PCH
Heavy Pigtoe	Pleurobema taitianum	E
Tennessee Pigtoe	Pleuronaia barnesiana	PE
Slabside Pearlymussel	Pleuronaia dolabelloides	E/CH
Fat Pocketbook	Potamilus capax	E
Inflated Heelsplitter	, Potamilus inflatus	Т
Rabbitsfoot	Quadrula cylindrica (=Theliderma) cylindrica	T/CH
Insects (3)	, , , , , , , , , , , , , , , , , , ,	•
Monarch Butterfly <sup>2</sup>	Danaus Plexippus	PT/PCH
Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	E
American Burying Beetle	Nicrophorus americanus	Н (Т)
Fishes (4)		
Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т/СН
Bayou Darter	Etheostoma rubrum	Т
Pearl Darter	Percina aurora	T/CH
Pallid Sturgeon	Scaphirhynchus albus	E

#### December 2024

Common Name	Scientific Name	Status
Amphibians (2)		
Eastern Hellbender	Cryptobranchus alleganiensis alleganiensis	PE
Dusky Gopher Frog	Rana sevosa	E/CH
Reptiles (13)		
Loggerhead Sea Turtle	Caretta caretta	T/CH
Green Sea Turtle	Chelonia mydas	Т
Leatherback Sea Turtle	Dermochelys coriacea	E
Eastern Indigo Snake	Drymarchon couperi	Т
Hawksbill Sea Turtle	Eretmochelys imbricata	E
Gopher Tortoise	Gopherus polyphemus	Т
Yellow-blotched Map Turtle	Graptemys flavimaculata	Т
Ringed Map Turtle	Graptemys oculifera	Т
Pearl River Map Turtle	Graptemys pearlensis	Т
Kemp's Ridley Sea Turtle	Lepidochelys kempii	E
Alligator Snapping Turtle <sup>2</sup>	Macrochelys temminckii	PT
Black Pinesnake	Pituophis melanoleucus lodingi	Т/СН
Alabama Red-bellied Turtle	Pseudemys alabamensis	E
<u>Birds (7)</u>		
Rufa Red Knot	Calidris canutus rufa	T/CH
Ivory-billed Woodpecker	Campephilus principalis	H (E)
Piping Plover	Charadrius melodus	T/CH
Mississippi Sandhill Crane	Grus canadensis pulla	E/CH
Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т
Wood Stork	Mycteria americana	Т
Red-cockaded Woodpecker	Dryobates (=Picoides) borealis	Т
Whooping Crane	Grus americana	E
Mammals (5)		
Gray Bat	Myotis grisescens	E
Northern Long-eared Bat	Myotis septentrionalis	E
Indiana Bat	Myotis sodalis	E
Tricolored Bat	Perimyotis subflavus	PE
Florida Manatee	Trichechus manatus latirostris	E

<sup>1</sup>Critical habitat only, species documented only in Alabama portions of Bear Creek.

<sup>2</sup>Proposed for listing with 4(d) rule.

+*Genus*1 (=*Genus*2) *species*: where *Genus*1 represents genus listed in the Federal Register; *Genus*2 represents current accepted nomenclature in the Integrated Taxonomic Information System.

+Species with historic/extirpated designations (H) are not considered in Section 7 Consultations.

### AT-RISK SPECIES OF MISSISSIPPI

At-risk species are collectively identified as those species that have been petitioned for listing under the ESA, are candidate species, and those that are under review. This list was compiled using the best available data and is subject to change as new information becomes available.

Section 7 consultation for at-risk species is not required. However, information regarding these species' ranges, populations, abundances, trends, and threats will inform the Service's assessment of these species for potential protections under the ESA.\_Additional information and recommendations for select at-risk species are available below.

#### D = Discretionary Review, P = Petitioned PS = Mississippi Priority Species

Common Name	Status			
Plants (4)				
Ravine (Impressed-nerve) Sedge	Carex impressinervia	Р		
Bog Spicebush	Lindera subcoriacea	Р		
Boykin's Lobelia	Lobelia boykinii	Р		
Wherry's Sweet Pitcher-plant	Sarracenia rubra ssp. wherryi <sup>1</sup>	Р		
Mussels (2)				
Alabama Spike	Elliptio arca	Р		
Delicate Spike	Elliptio arctata	Р		
Snails (1)				
Big Black Rocksnail	Lithasia hubrichti	D		
Insects (6)				
Eastern Beard Grass Skipper	Atrytone arogos arogos	D		
Southern Plains Bumble Bee	Bombus fraternus	Р		
American Bumble Bee	Bombus pensylvanicus	Р		
Variable Cuckoo Bumble Bee	Bombus variabilis	Р		
Southern Snaketail	Ophiogomphus australis	Р		
Yellow-sided Clubtail	Stylurus potulentus	Р		
Crayfish (8)				
Speckled Burrowing Crayfish	Fallicambarus (=Creaserinus) danielae <sup>2</sup>	Р		
Hardin Crayfish	Faxonius (Orconectes) wrighti	Р		
Crested Riverlet <sup>3</sup> Crayfish	Hobbseus cristatus	Р		
Oktibbeha Riverlet Crayfish	Hobbseus orconectoides	Р		
Tombigbee Riverlet Crayfish	Hobbseus petilus	Р		
Yalobusha Riverlet Crayfish	Hobbseus yalobushensis	Р		
Jackson Prairie Crayfish	Procambarus barbiger	Р		
Spinytail Crayfish	Procambarus fitzpatricki	Р		
 Fish (3)				
Alabama Shad <sup>4</sup>	Alosa alabamae	Р		
Yoknapatawpha Darter⁵	Etheostoma faulkneri PS			
Yazoo Darter <sup>5</sup>	Etheostoma raneyi PS			

Piebald Madtom	Noturus gladiator	Р
Reptiles (4)		
Eastern Diamondback Rattlesnake	Crotalus adamanteus	Р
Diamondback Terrapin	Malaclemys terrapin	Р
Black-knobbed Map Turtle	Graptemys nigrinoda	Р
Birds (1)		
Golden-winged Warbler	Vermivora chrysoptera	Р
Mammals (2)		-
Northern Hoary Bat	Lasiurus cinereus cinereus	D
Little Brown Bat	Myotis lucifugus	D

<sup>1</sup>Synonymous with *Sarracenia alabamensis* ssp. *wherryi*.

<sup>2</sup>Petitioned as *Fallicambarus danielae*.

<sup>3</sup> "Riverlet" erroneously used in place of "Rivulet" in Center for Biological Diversity *et al.* 2010 petition.

<sup>4</sup> NOAA-NMFS lead species.

<sup>5</sup> *Etheostoma raneyi* now recognized as two distinct species: *E. raneyi* and *E. faulkneri* (Yoknapatawpha Darter).

## SPECIES IN MISSISSIPPI NO LONGER PROTECTED UNDER THE ESA

The Fish and Wildlife Service (Service) removes species from the Federal List of Endangered and Threatened Wildlife and Plants, known as delisting, when the Service concludes that Recovery Plan goals are reached and threats to the species are no longer present or are being managed, or if the species is extinct.

Common Name	Scientific Name	Delisting Date
American Bald Eagle <sup>1,2</sup>	Haliaeetus leucocephalus	2007
Brown Pelican <sup>2</sup>	Pelecanus occidentalis	2009
Snail Darter	Percina tanasi	2022
Flat Pigtoe <sup>3</sup>	Pleurobema marshalli	2023
Stirrupshell <sup>3</sup>	Quadrula stapes	2023
Interior Least Tern <sup>2</sup>	Sterna antillarum	2021
Louisiana Black Bear	Ursus americanus luteolus	2016
Bachman's Warbler <sup>3</sup>	Vermivora bachmanii	2023

<sup>1</sup>Although the bald eagle was officially removed from the List of Endangered and Threatened Species in 2007, it continues to be protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (BGEPA). Bald eagles nest in Mississippi from December through mid-May in mature trees (e.g., bald cypress, sycamore, willow, etc.) near fresh to intermediate marshes or open water. Nest sites typically include at least one perch with a clear view of the water or area where the eagles usually forage. Bald eagles are vulnerable to disturbance during courtship, nest building, egg laying, incubation, and brooding. The Service developed the National Bald Eagle Management (NBEM) Guidelines to provide landowners, land managers, and others with information and recommendations regarding how to minimize potential project impacts to bald eagles, particularly where such impacts may constitute "disturbance," which is prohibited by the BGEPA.

<sup>2</sup>Continues to be protected under the Migratory Bird Treaty Act.

<sup>3</sup> Delisted due to Extinction

## FEDERALLY THREATENED AND ENDANGERED SPECIES AND HABITAT DESCRIPTIONS

#### PLANTS

#### Louisiana Quillwort

The federally endangered Louisiana quillwort (*Isoetes louisianensis*) is a small, nonflowering grass-like semi-aquatic to aquatic plant. Mature plants are six to ten inches long, mostly evergreen, with below-ground spore-bearing structures. Surveys need to be conducted during the appropriate field season when the plants are visible, typically November into May. Timing varies depending upon rainfall, as plants completely die back and are not visible when the intermittent and seasonal streams and associated riparian areas, which are primary habitats for this species, have dried up. As such, it is recommended that known sites be visited prior to initiating surveys to determine if plants will likely be visible. Threats include activities that increase stream sedimentation, reduce stream flow, and reduce the overstory canopy cover. View Environmental Conservation Online System (ECOS) species profile for Louisiana quillwort.

#### Pondberry

The federally endangered pondberry (*Lindera melissifolia*) is a member of the laurel family (Lauraceae) and is a deciduous aromatic shrub that averages two to six feet tall. It occurs in seasonally flooded wetlands, sandy sinks, pond margins, and swampy depressions. It is best to conduct surveys for this species during the flowering season, when the species is highly visible (mid-February to mid-April); however, surveys are still possible later in the season following leaf-out and into the fruiting season (late summer to fall). Fruits turn bright red as they mature in the late fall before being dropped in the early winter (December). Since pondberry is a deciduous shrub, it is recommended that a nearby site that is known to be occupied be visited prior to initiating any surveys to confirm adequate visibility of the species for a determination of its presence or absence at a project site. Threats include habitat destruction, population fragmentation, altered hydrologic regime, competition from encroaching vegetation, and disturbance by wild hogs and domestic cattle. View ECOS species profile for <u>pondberry</u>.

#### Price's Potato-bean

The federally threatened Price's potato-bean (*Apios priceana*) is a perennial, herbaceous, twining vine in the pea family (Fabaceae [=Leguminosae]). It is found on slopes or bluffs with open woods that often grade into creek and river bottoms. The species may also be found along forested margins of powerline and road rights-of-way. These areas are typically underlain by alkaline soils and calcareous rock. Surveys should be conducted when the species is in flower or fruit, typically mid-June into October. Price's potato-bean is readily confused with its more common relative, groundnut (*Apios americana*); therefore, surveys should be conducted by individuals familiar with both species. Threats include excessive shading from forest canopy closure, incompatible right-of-way maintenance (e.g., indiscriminate herbicide spraying), and competition from non-native, invasive plants. View ECOS species profile for <u>Price's potato-bean</u>.

#### Tennessee Yellow-eyed Grass

The federally endangered Tennessee yellow-eyed grass (*Xyris tennesseensis*) is a rare perennial herb/monocot with a fleshy, bulbous base, usually occurring in small clumps. This obligate wetland plant prefers relatively high pH and is found in open or thin canopy woods in gravelly seep-slopes or gravelly bars and banks of small streams, springs, and ditches. Although no records exist from Mississippi, it has been documented in Alabama near the MS/AL border (near Belmont, MS). View ECOS species profile for Tennessee yellow-eyed grass.

#### White Fringeless Orchid

The federally threatened white fringeless orchid (*Platanthera integrilabia*) is a perennial herbaceous plant with a light green stem (growing to over 2 feet tall) arising from a tuber. Flowering occurs from July to September and fruiting capsules mature in October. Surveys should be conducted for the species during the optimal timeframe for detection, when plants are in bloom (as it is difficult to distinguish from the more common *Platanthera* species without flowers), typically between June 15 and September 15. The species can be found in forested wetlands, wet, boggy areas at the heads of streams, and on seepage slopes that are partially shaded. Plants are often associated with *Sphagnum* (peat) moss and other orchids. Threats include habitat destruction and modification from development, incompatible forestry practices, alteration of hydrologic regime, incompatible right-of-way maintenance, invasive species competition, disturbance/herbivory by feral hogs and deer, and over-collection. View ECOS species profile for <u>white fringeless orchid</u>.

#### Whorled Sunflower

The federally endangered whorled sunflower (*Helianthus verticillatus*), a member of the aster family (Asteraceae [=Compositae]), is a tall (growing to over 15 feet tall), perennial herbaceous plant. Flowering occurs from mid- to late August into October. Surveys for the species should be conducted during the optimal timeframe for detection between August 1 and October 15. Flowers are arranged in branched flowers of 3 to 7 heads. Heads consist of deep yellow ray flowers and lighter yellow disk flowers. The species can be confused with its more common close relatives, narrowleaf sunflower (*H. angustifolius*), giant sunflower (*H. giganteus*), and sawtooth sunflower (*H. grosseserratus*). Plants are found on moist soils in open, grassy areas (such as wet prairies, road and utility rights-of-way, and along margins of agricultural fields) with little to no overstory canopy and are often associated with floodplains of small streams. Threats include indiscriminate herbicide application, incompatible mowing regimes, habitat destruction, and encroachment of woody vegetation. View ECOS species profile for whorled sunflower.

#### MUSSELS

All federally listed or proposed for listing mussels require clean, swiftly moving stable streams with pools and riffles. Work activities that affect channel geometry (depth, width) or that increase sedimentation and water turbidity could have adverse impacts on these species. Also, be advised that in-stream activities can affect channel geometry both up- and downstream.

#### Cumberlandian Combshell

The Cumberlandian combshell (*Epioblasma brevidens*) is federally listed as an endangered species and occurs in Mississippi, Tennessee, and Alabama. The species occurs in Bear Creek and Cedar Creek in Tishomingo County in Mississippi. Critical habitat has been designated in Bear Creek watershed in Tishomingo County (from state line to state line). View ECOS species profile for the <u>Cumberlandian</u> <u>combshell</u>.

#### Oyster Mussel

The oyster mussel (*Epioblasma capsaeformis*) is federally listed as an endangered species and occurs in Mississippi, Tennessee, and Alabama. Critical habitat has been designated in Bear Creek in Tishomingo County (from state line to state line). The species has never been documented in Mississippi but is found just across the state line in Bear Creek in Alabama. View ECOS species profile for the <u>oyster mussel</u>.

#### Southern Combshell

The Southern combshell (*Epioblasma penita*) is federally listed as an endangered species and occurs in Mississippi and Alabama. This is a small sized species with a light brown shell and multiple ray patterns. This species can be found in Buttahatchie River and East Fork Tombigbee River across Itawamba, Lowndes, and Monroe counties in Mississippi. No critical habitat has been designated for this species. View ECOS species profile for the <u>Southern combshell</u>.

#### <u>Snuffbox</u>

The snuffbox (*Epioblasma triquetra*) is federally listed as an endangered species and occurs in Alabama, Arkansas, Illinois, Indiana, Kentucky, Michigan, Minnesota, Mississippi. Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, Wisconsin. The species occurs in Bear Creek in Tishomingo County in Mississippi. No critical habitat has been designated for this species in Mississippi. View ECOS species profile for the <u>snuffbox</u>.

#### <u>Longsolid</u>

The longsolid (*Fusconaia\_subrotunda*) is federally listed as a threatened species and occurs in Alabama, Illinois, Indiana, Kentucky, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia. The species has never been documented in Mississippi but may occur in the mainstem Tennessee River (Pickwick Reservoir) in Tishomingo County. No critical habitat has been designated for this species in Mississippi. View ECOS species profile for the <u>longsolid</u>.

#### Pink Mucket

The pink mucket (*Lampsilis abrupta*) is federally listed as an endangered species and occurs in Alabama, Arkansas, Illinois, Indiana, Kentucky, Louisiana, Missouri, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia. The species has never been documented in Mississippi but may occur in the mainstem Tennessee River (Pickwick Reservoir) in Tishomingo County. Critical habitat has not been designated for this species. View ECOS species profile for the <u>pink mucket</u>.

#### Orangenacre Mucket

The orangenacre mucket (*Lampsilis perovalis*) is federally listed as a threatened species and occurs in Mississippi and Alabama. This is a medium sized species that is tan with a bean shaped shell that sometimes has green rays. This species can be found in the East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, and Luxapallila Creek across Itawamba, Lowndes, and Monroe counties in Mississippi. Critical habitat has been designated for this species in the East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, and Luxapallila Creek. View ECOS species profile for the orangenacre mucket.

#### Alabama Lampmussel

The Alabama lampmussel (*Lampsilis virescens*) is federally listed as an endangered species and occurs in Mississippi, Tennessee, and Alabama. Critical habitat has been designated in Bear Creek in Tishomingo County (from state line to state line). The species has never been documented in Mississippi but is found just across the state line in Bear Creek in Alabama. View ECOS species profile for the <u>Alabama</u> <u>lampmussel</u>.

#### Alabama Moccasinshell

The Alabama moccasinshell (*Medionidus acutissimus*) is federally listed as a threatened species and occurs in Mississippi and Alabama. This is a small species that thin and elongate with green rays on a brown shell that has some sculpturing. This species can be found in the Bull Mountain Creek, Buttahatchie River, and Luxapallila Creek across Itawamba, Lowndes, and Monroe counties in Mississippi. Critical habitat has been designated for this species in the East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, and Luxapallila Creek. View ECOS species profile for the <u>Alabama</u> moccasinshell.

#### Cumberland Moccasinshell

The Cumberland moccasinshell (*Medionidus conradicus*) is proposed for federal listing as an endangered species and occurs in Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia. This is a small species that thin and elongate with green rays on a brown shell that has some sculpturing. The species has never been documented in Mississippi but is found just across the state line in Bear Creek in Alabama. Critical habitat has not been designated for this species. View ECOS species profile for the <u>Cumberland moccasinshell</u>.

#### Round Hickorynut

The federally threatened round hickorynut (*Obovaria subrotunda*) is a wide-ranging species, currently found in the Great Lakes, Ohio, Cumberland, Tennessee, and Lower Mississippi River basins. The species occurs in small streams to large rivers at depths from less than one foot to more than six feet and prefers a mixture of sand and gravel substrate. Within Mississippi, critical habitat is designated for the Big Black River in Montgomery County, specifically, a 4-mile section between State Routes 407 and 413 near the town of Kilmichael. View ECOS species profile for the <u>round hickorynut</u>.

#### Alabama Hickorynut

The Alabama hickorynut (*Obovaria unicolor*) is proposed for federal listing as a threatened species and occurs in Mississippi and Alabama. This is a small species that is smooth with a black to brown shell that resembles a hickorynut. This species can be found in the East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, Luxapallila Creek, Noxubee River, and Sucarnoochee River across Itawamba, Kemper, Lauderdale, Lowndes, Monroe, Noxubee, Oktibbeha, and Winston counties in Mississippi. Critical habitat has not been designated for this species. View ECOS species profile for the <u>Alabama</u> <u>hickorynut</u>.

#### Undescribed Hickorynut

The undescribed hickorynut (*Obovaria cf. unicolor*) is proposed for federal listing as a threatened species and occurs in Mississippi and Louisiana. This is a small species that is smooth with a black to brown shell that resembles a hickorynut. This species can be found in the Amite River, Tangipahoa River, Tickfaw River, Pearl River, and Pascagoula River across Amite, Forrest, George, Greene, Hancock, Jackson, Leake, Madison, Marion, Pearl River, Perry, Pike, Scott, Stone, and Wayne counties in Mississippi. Critical habitat has not been designated for this species. View ECOS species profile for the <u>undescribed</u> <u>hickorynut</u>

#### Sheepnose Mussel

The sheepnose mussel (*Plethobasus cyphyus*) is federally listed as an endangered species in Alabama, Illinois, Indiana, Iowa, Kentucky, Minnesota, Mississippi, Missouri, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. A population of sheepnose mussel survives in the Big Sunflower River, which may be limited to a 12- to 15-mile reach upstream of Indianola in Sunflower County. Critical habitat has been proposed to be designated for the sheepnose mussel in the Big Sunflower River in Bolivar and Sunflower counties in Mississippi. This is a larger stream species occurring primarily in shallow shoal habitats with moderate to swift currents over coarse sand and gravel. Juvenile mussels variably sized individuals have been found in recent sampling efforts indicating some level of recruitment in the population. The species is believed to be extirpated from the Hatchie and Big Black Rivers. View ECOS species profile for the <u>sheepnose mussel</u>.

#### Black Clubshell

The black clubshell (*Pleurobema curtum*) is federally listed as an endangered species and occurs in Mississippi and Alabama. This is a medium sized species that is smooth with a black to brown shell that resembles the shape of the head of a driver golf club. This species can be found in the East Fork Tombigbee River across Itawamba and Monroe counties in Mississippi. Critical habitat has not been designated for this species. View ECOS species profile for the <u>black clubshell</u>.

### Southern Clubshell

The Southern clubshell (*Pleurobema decisum*) is federally listed as an endangered species and occurs in Mississippi and Alabama. This is a medium sized species that is smooth with a light brown shell that resembles the shape of the head of a driver golf club with a straight bottom. This species can be found in East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, Luxapallila Creek, Noxubee River, and Sucarnoochee River across Itawamba, Lowndes, Monroe, Noxubee, and Kemper counties in Mississippi. Critical habitat has been designated for this species in the East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, Luxapallila Creek, and Sucarnoochee River. View ECOS species profile for the <u>Southern clubshell</u>.

#### **Ovate Clubshell**

The ovate clubshell (*Pleurobema perovatum*) is federally listed as an endangered species and occurs in Mississippi and Alabama. This is a medium sized species that is smooth with a brown shell that resembles the shape of the head of a driver golf club that is slightly rounded. This species can be found in the Buttahatchie River and Luxapallila Creek across Lowndes and Monroe counties in Mississippi. Critical habitat has been designated for this species in the East Fork Tombigbee River, Bull Mountain Creek, Buttahatchie River, and Luxapallila Creek. View ECOS species profile for the <u>ovate clubshell</u>.

#### Louisiana Pigtoe

The Louisiana pigtoe (*Pleurobema riddellii*) is proposed for federal listing as a threatened species and occurs in Mississippi, Arkansas, Louisiana, and Texas. It occurs in the Pearl River in Hancock, Hinds, Marion, Pearl River, and Rankin counties in Mississippi. Louisiana pigtoe is a medium-sized freshwater mussel (shell lengths to greater than 62 mm) with a brown to black, triangular to subquadrate shell without external sculpturing, sometimes with greenish rays. Other native mussel species (e.g. Wabash pigtoe, *Fusconaia flava* and Mississippi pigtoe, *Pleurobema beadleianum*) can easily be mistaken for Louisiana pigtoe when identified by shell morphology alone. Critical habitat has not been designated for this species in Mississippi. View ECOS species profile for the Louisiana pigtoe.

#### Heavy Pigtoe

The heavy pigtoe (*Pleurobema taitianum*) is federally listed as an endangered species and occurs in Mississippi and Alabama. This is a medium sized species that has a brown somewhat triangular thick shell. This species can be found in the East Fork Tombigbee River and Buttahatchie River across Itawamba, Lowndes, and Monroe counties in Mississippi. Critical habitat has not been designated for this species. View ECOS species profile for the heavy pigtoe.

#### Tennessee Pigtoe

The Tennessee pigtoe (*Pleuronaia barnesiana*) is proposed for federal listing as an endangered species and occurs in Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia. The species occurs in Bear Creek in Tishomingo County in Mississippi. Critical habitat has not been designated for this species. View ECOS species profile for the <u>Tennessee pigtoe</u>

#### Slabside Pearlymussel

The slabside pearlymussel (*Pleuronaia dolabelloides*) is federally listed as an endangered species in Alabama, Mississippi, Tennessee, and Virginia. The species occurs in Bear Creek in Tishomingo County in Mississippi. Critical habitat has been designated in Bear Creek watershed in Tishomingo County (from state line to state line). View ECOS species profile for the <u>slabside pearlymussel</u>.

#### Fat Pocketbook

The fat pocketbook (*Potamilus capax*) is federally listed as an endangered species and occurs in Arkansas, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. The species occurs in Adams, Bolivar, Claiborne, Coahoma, DeSoto, Issaquena, Jefferson, Sharkey, Tunica, Warren, Washington, Wilkinson, and Yazoo counties in Mississippi in the Mississippi River and the lower Big Sunflower River. It is a broad, rounded, and slightly angular mussel with a smooth, yellowish exterior color that is frequently clouded with brown. Fat pocketbook occur primarily in sand and mud substrates, although the species has occasionally been found in fine gravel and hard clay. Water depth ranges from a few inches to several feet. The fish host for this species is the freshwater drum (*Aplodinotus grunniens*). Critical habitat has not been designated for this species. View ECOS species profile for the <u>fat pocketbook</u>.

#### Inflated Heelsplitter

The inflated heelsplitter (*Potamilus inflatus*) is federally listed as a threatened species and occurs in Alabama, Louisiana, and Mississippi. It occurs in the Amite River, Pearl River, East Fork Tombigbee River, and Buttahatchie River in Amite, Hancock, Itawamba, Lowndes, Marion, Monroe, and Pearl River counties in Mississippi. It inhabits areas with moderate to swift currents and prefers riffle or shoal areas with stable bottoms composed of sandy gravel or firm mud gravel and cobble. Critical habitat has not been designated for this species. View ECOS species profile for the <u>inflated heelsplitter</u>.

#### Rabbitsfoot

The rabbitsfoot (*Quadrula cylindrica cylindrica*) is federally listed as a threatened species and occurs in Alabama, Arkansas, Illinois, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Ohio, Oklahoma, Pennsylvania, and Tennessee. The species occurs in Bear Creek, Big Sunflower River, and Big Black River in Bolivar, Hinds, Sunflower, Tishomingo, Warren, and Yazoo counties in Mississippi. Critical habitat has been designated for the Big Black River in Hinds and Warren Counties (from Porter Creek to Highway 27), the Big Sunflower River in Sunflower County (from Highway 442 to the Quiver River), and Bear Creek in Tishomingo County (from state line to state line). View ECOS species profile for the <u>rabbitsfoot</u>.

#### INSECTS

#### Mitchell's Satyr Butterfly

The federally endangered Mitchell's satyr butterfly (*Neonympha mitchellii mitchellii*) is a medium-sized butterfly with an overall rich brown color. A distinctive series of orange-ringed black circular eyespots with silvery centers are located on the lower surfaces of both pairs of wings. The species occurs in wetlands where low nutrient systems receive carbonate-rich ground water from seeps and springs. In Mississippi, Mitchell's satyr butterfly has been found in small upland wetlands created by beaver dams and in wetlands formed by road culverts. The greatest threats to the Mitchell's satyr butterfly are habitat destruction caused by beaver control, draining and filling of wetlands, invasion from exotic weeds, and contamination of wetlands by pesticides, fertilizer, and nutrient runoff from adjacent agriculture. View ECOS species profile for the Mitchell's satyr butterfly.

#### Monarch Butterfly

The monarch butterfly is proposed for federal listing as a threatened species (89 FR 100662; December 12, 2024). Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.), and larvae emerge after two to five days. The larva then pupates into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks; overwintering adults enter into reproductive diapause (suspended reproduction) and live six to nine months. Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period of time. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 3,000 km and last for over two months. View ECOS species profile for the <u>monarch butterfly</u>.

#### FISHES

#### Bayou Darter

The federally threatened Bayou darter (*Etheostoma rubrum*) is endemic to Mississippi and occurs in Claiborne, Copiah, and Hinds counties. It is found only in the Bayou Pierre River and its tributaries: White Oak Creek, Foster Creek, and Turkey Creek. The Bayou darter prefers stable gravel riffles, coarse woody structure with flow, or sandstone exposures with large-sized gravel or rock. Habitat loss or degradation has been a major contributor to the reduction in Bayou darter numbers. Historical instream-bed gravel mining has caused various head-cuts throughout the last 50 years. Along with severe erosion rates from adjacent farm fields and bankside collapse, the river is becoming more shallow and wider. Tributaries are less impacted but also are impact by threats including gravel mining, stream fords, ATV traffic, and non-point and point source pollution. No critical habitat has been designated for this species. View ECOS species profile for the <u>Bayou darter</u>.

#### Gulf Sturgeon

The federally threatened Gulf sturgeon (*Acipenser oxyrinchus desotoi*) is found in the coastal rivers of the northeastern Gulf of Mexico generally from Lake Pontchartrain in Louisiana to the Suwanee River in Florida. Critical habitat has been designated for the species in Mississippi to include portions of the Gulf of Mexico, the Pearl River (including the Bogue Chitto), and Pascagoula River (including the Bouie, Chickasawhay, and Leaf Rivers). The species occurs in Clarke, Copiah, Forrest, George, Greene, Hancock, Harrison, Hinds, Jackson, Jefferson Davis, Jones, Lawrence, Madison, Marion, Pearl River, Perry, Pike, Rankin, Simpson, Walthall, and Wayne counties in Mississippi. Gulf sturgeon are primitive, anadromous fish that annually migrate from the Gulf of Mexico into freshwater streams to spawn. Subadults and adults spend eight to nine months each year in rivers. Adult and subadult holding areas have been identified in the Pascagoula River. The decline of the Gulf sturgeon is primarily due to limited access to riverine migration routes and historic spawning areas, habitat modification, and water quality degradation. View ECOS species profile for the <u>Gulf sturgeon</u>.

#### Pallid Sturgeon

The federally endangered pallid sturgeon (*Scaphirhynchus albus*) is found in Arkansas, Illinois, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Tennessee. In Mississippi the species is found throughout the lower Mississippi River in Adams, Bolivar, Claiborne, Coahoma, DeSoto, Jefferson, Tunica, Warren, and Wilkinson counties. These fish require large, turbid, free-flowing riverine habitats, and feed on aquatic invertebrates and small fish. They are usually found near the bottom of rivers on sand flats or gravel bars. Little information is known on spawning or migration habits of these fish, although spawning likely occurs in the spring and summer months. Pallid sturgeon may be entrained into water intake structures or by dredging. No critical habitat has been designated for this species. View ECOS species profile for the <u>pallid sturgeon</u>.

#### Pearl Darter

The federally threatened Pearl darter (*Percina aurora*) was historically found in the Pearl and Pascagoula River systems in Mississippi and Louisiana. It occurs in Clarke, Covington, Forrest, George, Greene, Jackson, Jones, Lauderdale, Newton, Perry, Simpson, Stone, and Wayne counties in Mississippi. It was extirpated from the Pearl River for 50 years until reintroductions began in 2023 in the Strong River. During the spring spawning season, the darter prefers stable gravel riffles or sandstone exposures with large-sized gravel or rock. Outside of the spawning season, the species is commonly found adjacent to sandbars and associated with detritus. The Pearl darter is vulnerable to non-point source pollution, urbanization, and changes in river geomorphology. Critical habitat has been designated for the Pearl darter in the Pascagoula River watershed (including the Big Black/Black Creek, Chunky, Bouie, Chickasawhay, and Leaf Rivers and Okatoma Creek) and in the Pearl River watershed (including the Strong River). View ECOS species profile for the <u>Pearl darter</u>.

#### AMPHIBIANS

#### Dusky Gopher Frog

The federally endangered dusky gopher frog (*Rana sevosa*), formerly called the Mississippi gopher frog, was widely distributed in the southern counties of Mississippi historically. Dusky gopher frog habitat includes both upland sites historically forested with longleaf pine and isolated temporary wetland breeding sites embedded within the forested landscape. Adult and subadult dusky gopher frog spend most of their lives underground, primarily in stump holes and small mammal burrows, but they will also use gopher tortoise burrows. Breeding sites are small, relatively shallow, isolated, depressional ponds (not connected to any other water body) that dry completely on a cyclic basis. Emergent herbaceous vegetation is important for egg attachment. The dominant source of water to the ponds is rainfall within their small, localized watersheds. Approximately 4,933 acres are designated as critical habitat in Forrest, Harrison, Jackson, and Perry Counties, Mississippi. View ECOS species profile for the <u>dusky gopher frog</u>.

#### Eastern Hellbender

The Eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*) was proposed for federal listing as an endangered species on December 13, 2024. The Eastern hellbender is a large, aquatic salamander that occurs in cool, permanent streams across 15 states. Cool and clear water is important because hellbenders breathe entirely through their skin, which contains numerous folds to increase oxygen absorption. Adult Eastern hellbenders spend most of their life under large, flat rocks that shelter them; whereas larval and juvenile hellbenders hide beneath large rocks and under small stones in gravel beds. Eastern hellbenders are one of two subspecies of hellbenders, with the Ozark Hellbender the other. Primary threats to this species include sedimentation (e.g. from clear cutting or ground disturbance), degraded water quality (e.g. from development or chemical pollution), and habitat destruction (e.g. from gravel mining and hydrological alterations). View ECOS species profile for the <u>Eastern hellbender</u>.

#### REPTILES

#### Alabama Red-bellied Turtle

The federally endangered Alabama red-bellied turtle (*Pseudemys alabamensis*) is found in the lower Pascagoula River and its tributaries and bayous: Bayou Chemise, Bluff Lake, Dead River, Escatawpa River, Farragut Lake, John's Bayou, King's Bayou, Little Bear Bayou, Mary Walker Bayou, Page Bayou, and Sioux Bayou. It is also found in the Back Bay of Biloxi, Bayou Cassotte, Bayou Cumbest, Biloxi River, Old Fort Bayou, and the Tchoutacabouffa River. Destruction of nesting areas along riverbanks; degradation of submerged aquatic vegetation feeding areas; and reduced water quality have impacted this species. View ECOS species profile for the <u>Alabama red-bellied turtle</u>.

#### Alligator Snapping Turtle

The alligator snapping turtle (*Macrochelys temminckii*) is a large freshwater turtle that is proposed for federal listing as a threatened species throughout 14 states in the Southeast and Midwest United States (November 8, 2021; 88 FR 62434). The species generally occurs in large rivers and major tributaries; however, they also inhabit a variety of small streams, bayous, canals, swamps, oxbow lakes, and reservoirs associated with these large rivers. Threats include legal and illegal harvest, drowning as a result of by-catch from recreational and commercial fishing, hook ingestion, habitat alteration, and nest predation. Although this species does not currently receive federal protections, the Service recommends avoiding impacts to adult turtles and their nesting habitat. Adult turtles congregate in pools of perennial water bodies during the winter. Nesting occurs in the spring and summer months along steep banks of perennial waterbodies, with nests sometimes detected on dams and other water control structures. View ECOS species profile for the <u>alligator snapping turtle</u>.

#### Black Pinesnake

The federally threatened Black pinesnake (*Pituophis melanoleucus lodingi*) occurs in uplands of pinedominated forests, found throughout the historical longleaf pine range in southern Mississippi. Suitable habitat consists of sandy, well-drained soils for burrowing, abundant herbaceous forage to maintain prey base, and an open-canopied overstory with low shrub density allowing sunlight to reach the ground, which the species utilizes for basking. Fire (or other disturbance) maintains suitable habitat and creates underground refugia, by burning the stumps and root systems of dead and decaying trees. Some of the major threats to the species are habitat degradation (often attributed to fire suppression and can reduce prey density), habitat fragmentation (often attributed to urbanization and agricultural/silvicultural conversion), direct human impacts, and reproductive isolation. Critical habitat is designated in Forrest, George, Greene, Harrison, Jones, Marion, Perry, Stone, and Wayne Counties. View ECOS species profile for the <u>Black Pinesnake</u>.

#### Eastern Indigo Snake

The federally threatened Eastern indigo snake (*Drymarchon couperi*) prefers upland habitat types (e.g. pine sandhills, pine flatwoods, hardwood hammocks, and coastal dunes), but also uses a variety of lowland and human-altered habitats. They may move seasonally between upland and lowland habitats, especially in northern portions of their range. Throughout their range, Eastern indigo snakes use below-ground shelter sites for refuge, breeding, feeding and nesting. They depend on gopher tortoise burrows in xeric sandhill habitats throughout the northern portion of the species' range for overwintering shelter sites. Adult Eastern indigo snakes move long distances and have very large home ranges; from several hundred to several thousand acres (tens to over a thousand hectares). Historically, the Eastern indigo snake occurred throughout Florida and in the coastal plain of Georgia, Alabama, and Mississippi. The Eastern indigo snake is currently considered extirpated in Mississippi. View the ECOS species profile for the <u>Eastern indigo snake</u>.

#### Gopher Tortoise (Western Distinct Population Segment)

The federally threatened Gopher tortoise (*Gopherus polyphemus*) occupies a wide range of upland habitat types; most frequently pine-dominated forests, found throughout the historical longleaf pine range in southern Mississippi. Suitable habitat consists of well-drained, sandy soils for burrowing; an abundance of diverse herbaceous forage; and an open-canopied overstory with low shrub density, allowing sunlight to reach the ground, which the species utilizes for basking and egg incubation. The gopher tortoise digs burrows for shelter, and groups of tortoises dig burrows in the same location, forming a colony. Some of the major threats to the species are habitat degradation (often attributed to fire suppression which can result in forage and sunlight reduction), habitat fragmentation (often attributed to urbanization and agricultural/silvicultural conversion), direct human impacts, and reproductive isolation. View ECOS species profile for the <u>Gopher Tortoise</u>.

#### Pearl River Map Turtle

The federally threatened Pearl River map turtle (*Graptemys pearlensis*) is found throughout the Pearl River system in Mississippi and Louisiana. Suitable habitat includes rivers and large creeks with sand and gravel bottoms, sandbars, adequate flow, adequate supply of invertebrate prey (particularly freshwater mussels) and an abundance of emergent and floating basking structures of various sizes. Threats include habitat loss and degradation (i.e., channel and hydrological modifications and impoundments, removal or loss of deadwood, declines in water quality from agricultural run-off, development, and mining). View ECOS species profile for the <u>Pearl River map turtle</u>.

#### **Ringed Map Turtle**

The federally threatened ringed map turtle (*Graptemys oculifera*) is found throughout the Pearl River and Bogue Falaya drainages in Mississippi and Louisiana. Preferred habitat for the species includes river stretches with moderate currents, abundant basking sites, and sandbars for nesting. Stream modification in the Pearl River for flood control and urban development has significantly contributed to the decline of the species. Threats to this species include removing forested habitat along the riverbanks (source of the deadwood used for basking) and/or removing instream deadwood used for basking and foraging (commonly referred to as desnagging). Water quality degradation has also posed a serious problem for the turtle. View ECOS species profile for the <u>ringed map turtle</u>.

#### Sea Turtles: Green, Hawksbill, Kemp's Ridley, Leatherback, and Loggerhead

Five species of federally protected sea turtles inhabit the Gulf of Mexico waters along the Mississippi coast: the green (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*), Kemp's ridley (*Lepidochelys kempii*), leatherback (*Dermochelys coriacea*), and loggerhead (*Caretta caretta*). Although sea turtles are predominantly marine animals, they come ashore to nest on barrier island and mainland beaches. Currently, only the loggerhead sea turtle is known to nest in Mississippi. Mortality due to fishing nets and trawls, ingestion of inedible objects, and nest predation have reduced these species numbers. Critical habitat for the loggerhead sea turtle includes Horn and Petit Bois Islands in Jackson County. View ECOS species profiles for the green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles.

#### Yellow-blotched Map Turtle

The federally threatened yellow-blotched map turtle (*Graptemys flavimaculata*) occurs in the Chickasawhay, Leaf, and Pascagoula Rivers and their larger tributaries. The yellow-blotched map turtle prefers river stretches with moderate currents, abundant basking sites, and sandbars for nesting. Threats to this species include removing forested habitat along the riverbanks (source of the deadwood used for basking) and/or removing instream deadwood used for basking and foraging (commonly referred to as desnagging). Water quality degradation has also posed a serious problem for the turtle. View ECOS species profile for the <u>yellow-blotched map turtle</u>.

#### BIRDS

#### Eastern Black Rail

The federally threatened Eastern black rail (*Laterallus jamaicensis jamaicensis*) is a small, secretive marsh bird. One of four subspecies of black rails, it occurs in 36 states and multiple territories along the U.S. Atlantic and Gulf coasts, in the U.S. interior east of the Rocky Mountains, and in Mexico, Central America, and the Caribbean. Although historically uncommon in Mississippi, the species was historically in coastal marshes during the winter months (i.e., non-nesting season); however recent observations of the species have also been documented during the summer breeding season. While it can be found in salt, brackish, and freshwater marshes, it has a very specific niche habitat, requiring dense herbaceous vegetation (i.e., rushes, grasses, sedges) to provide shelter and cover. View ECOS species profile for the Eastern black rail.

#### Mississippi Sandhill Crane

The federally endangered Mississippi sandhill crane (*Grus canadensis pulla*) is found only in Jackson County. Critical habitat has been designated for the species on and adjacent to the Mississippi Sandhill Crane National Wildlife Refuge. Primary habitat for the cranes is wet pine savanna grasslands with scattered longleaf pine, slash pine, and pond cypress. Crane nests are typically laid in an open area of grasses and sedges with perennial shallow water, but they may also nest in swamp or marsh edges. During fall, winter, and early spring, the cranes will feed in small corn and chufa fields and in pastures. Increasing commercial, industrial, and residential development in the area surrounding the refuge is limiting the availability of off-refuge habitat for the crane and limiting the ability of the refuge to manage crane habitat using prescribed fires. Because the cranes fly between nesting, foraging, and roosting areas that may be off-refuge or between refuge units, the increase in off-refuge motorized vehicular traffic increases the likelihood that a crane will be hit and killed. View ECOS species profile for the <u>Mississippi sandhill crane</u>.

#### **Piping Plover**

The federally threatened piping plover (*Charadrius melodus*) is a small shorebird approximately seven inches long with sand-colored plumage on their backs and crown and white underparts. The piping plover breeds from central Canada south to Nebraska and Iowa, east along the Great Lakes and Newfoundland, and south along the Atlantic Coast to Virginia. Plovers depart for the wintering grounds from mid-July through late October. Breeding and wintering plovers feed on exposed wet sand in wash zones; intertidal ocean beach; wrack lines; washover passes; mud-, sand-, and algal flats; and shorelines of streams, ephemeral ponds, lagoons, and salt marshes by probing for invertebrates at or just below the surface. They use beaches adjacent to foraging areas for roosting and preening. Small sand dunes, debris, and sparse vegetation within adjacent beaches provide shelter from wind and extreme temperatures. The piping plover does not nest in Mississippi but winters along the coastal beaches and barrier islands. Critical habitat has been designated along many sand beach areas along the Mississippi Gulf Coast. Major threats to this species along the Gulf of Mexico include the loss and degradation of beach habitat due to erosion and shoreline stabilization development, disturbance by humans and pets, and predation. View ECOS species profile for the <u>piping plover</u>.

#### Red-cockaded Woodpecker

The federally threatened red-cockaded woodpecker (*Picoides borealis*) excavates nesting cavities in mature and old growth pine trees (60+ years old). Red-cockaded woodpeckers are cooperative breeders, living in family groups that typically consist of a breeding pair with or without helper birds. Helpers are typically male birds; however, females may become helpers as well. A collection of cavity trees where the group nests and roosts is called a cluster. All cavity trees, active and inactive, are important to the group and should therefore be avoided. In addition, older (30+ years) pine stands within a half mile of a colony should be considered suitable or potentially suitable foraging habitats and should not be adversely impacted without additional foraging habitat analysis. View ECOS species profile for the red-cockaded woodpecker.

#### Rufa Red Knot

The federally threatened rufa red knot (*Calidris canutus rufa*), is a medium-sized shorebird about 9 to 11 inches in length with a proportionately small head, small eyes, short neck, and short legs. The rufa red knot can be found in Mississippi during the winter months (generally October to March). In the southeastern United States, rufa red knot forage along sandy beaches, tidal mudflats, salt marshes, and peat banks. Observations along the Texas coast indicate that rufa red knot forage on beaches, oyster reefs, and exposed bay bottoms and roost on high sand flats, reefs, and other sites protected from high tides. In wintering and migration habitats, rufa red knot commonly forage on bivalves, gastropods, and crustaceans. Coquina clam (*Donax variabilis*), a frequent and often important food resource for rufa red knot, are common along many gulf beaches. Major threats to this species along the Gulf of Mexico include the loss and degradation of habitat due to erosion and shoreline stabilization development, disturbance by humans and pets, and predation. Critical habitat is designated for Ship and Cat Islands (April 13, 2023). View ECOS species profile for the <u>rufa red knot</u>.

#### Whooping Crane

The federally endangered whooping crane occurs only in North America and is North America's tallest bird, with males approaching 1.5 m (5 ft) when standing erect. The whooping crane adult plumage is snowy white except for black primaries, black or grayish alula (specialized feathers attached to the upper leading end of the wing), sparse black bristly feathers on the carmine crown and malar region (side of the head from the bill to the angle of the jaw), and a dark gray-black wedge-shaped patch on the nape. Whooping cranes are a long-lived species; current estimates suggest a maximum longevity in the wild of at least 30 years. Whooping cranes currently exist in the wild at three locations and in captivity at 12 sites. One population (Eastern Migratory) winters in Alabama each year (November to March). First established in 2001, there are currently 76 individuals in this population, and their flyway spans from Wisconsin to Alabama. View ECOS species profile for the <u>whooping crane</u>.

#### MAMMALS

#### <u>Gray Bat</u>

The federally endangered gray bat (*Myotis grisescens*) is a cave obligate species; however, they may also occasionally roost at man-made sites that simulate cave habitats such as bridges, culverts, and storm drains. Activities that impact caves or suitable mines could adversely affect this species. Protection measures for the gray bat include preventing human entry into caves with hibernating or maternity gray bat colonies by installing bat friendly gates and establishing a buffer of undisturbed vegetation around bat caves. View ECOS species profile for the gray bat.

#### Indiana Bat

The federally endangered Indiana bat (*Myotis sodalis*) is a migratory bat that hibernates in caves and abandoned mines in the winter, then migrates to wooded areas (roost sites) in the spring to bear and raise their young over the summer. Reproductive females occupy roost sites under the exfoliating bark of large, often dead, trees. Roost trees are typically within canopy gaps in the forest where the primary roost tree receives direct sunlight for more than half the day. Habitats include riparian zones, bottomland and floodplain habitats, wooded wetlands, and upland communities. A significant threat to the survival and recovery of Indiana bats in Mississippi is the destruction of maternity and foraging habitats; therefore, we recommend that all tree removal and bridge construction activities in areas supporting Indiana Bat habitat take place in the non-summer occupancy season (October 1 -March 14). See the <u>Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines</u>. View ECOS species profile for the <u>Indiana bat</u>.

#### Northern Long-eared Bat

The federally endangered northern long-eared bat (*Myotis septentrionalis*; NLEB) is a migratory bat that hibernates in caves, mines, and occasionally culverts and migrates to wooded areas to raise young over the summer. During the summer, NLEB roost singly or in colonies underneath bark, in cavities, or in crevices of both live trees and snags (dead trees). NLEB seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. Historically this species was only documented in northern Mississippi; however, recent surveys have documented both summer and winter roost records in culverts and bridges adjacent to the Mississippi River in the southwest portion of

the state. For additional information on consultation and survey guidance for this species, view the ECOS species profile for <u>Northern Long-eared Bat</u>.

#### Tricolored Bat

The tricolored bat (*Perimyotis subflavus*; TCB) was proposed for federal listing as an endangered species on September 14, 2022. The TCB is a small insectivorous bat that is distinguished by its unique tricolored fur and often appears yellowish to nearly orange. The once common species is wide ranging across the eastern and central United States and portions of southern Canada, Mexico and Central America. During the winter, TCB are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, TCBs are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, TCB are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and often human structures such as culverts and bridges. TCB face extinction due primarily to the range-wide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. White-nose syndrome has caused estimated declines of more than 90 percent in affected TCB colonies across the majority of the specie' range. For additional information on consultation and survey guidance for this species, view the ECOS species profile for tricolored bat.

#### Florida Manatee

The federally threatened Florida manatee (*Trichechus manatus latirostris*), a subspecies of the West Indian manatee, is an aquatic mammal that occurs in rivers, estuaries, and coastal areas of the southeastern United States. Manatees have large, seal-shaped bodies with paired flippers and a round, paddle-shaped tail. Most manatee sightings in Mississippi occur in tidal rivers such as the Pascagoula and Jordan Rivers. Manatees have also been spotted in Biloxi Bay, Bay St. Louis, and near shore in the Gulf of Mexico. Most of the sightings in Mississippi occur during the months of June through November; however, winter sightings do occur. View ECOS species profile for the <u>Florida manatee</u>.

## FEDERALLY THREATENED AND ENDANGERED SPECIES BY COUNTY

The following county lists represent Section 7 consultation ranges for listed species within Mississippi. At-risk species are not included in these county lists, as consultation for such species is not required under section 7 of the ESA. These county lists are for reference purposes only. Actual consultation requirements with the Service are determined on a project-by-project basis. Contact the Mississippi Field Office to determine whether a given project may require surveys and/or consultation for listed species.

#### List of Abbreviations

E = Endangered T = Threatened PE= Proposed Endangered PT = Proposed Threatened CH = Critical Habitat PCH = Proposed Critical Habitat

Adams County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Alcorn County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Whooping Crane	Grus americana	Т	Nov 1 to March 15
Fishes	None			
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	E	May 15 – Jun 30 or Aug 1 – Sep 30
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Gray Bat	Myotis grisescens	E	Year round
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
	White Fringeless Orchid	Platanthera integrilabia	Т	Jul 1 – Sep 30
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Amite County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Undescribed Alabama Hickory	Obovaria cf. unicolor	PT	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Attala County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Plants	None			
Reptiles	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Benton County				
Category	Species	Scientific Name	Status	<b>Optimal Survey Window</b>
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Bolivar County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
	Rabbitsfoot	Quadrula cylindrica cylindrica	E	Low flow conditions
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Calhoun County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Carroll County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

#### Chickasaw County Category Scientific Name **Optimal Survey Window Species** Status Amphibians None Birds None Fishes None Insects None Mammals Northern Long-eared Bat Myotis septentrionalis Е May 15 – Aug 15 Tricolored Bat Perimyotis subflavus ΡE May 15 – Aug 15 Mussels None Plants Jun 15 – Oct 31 Price's Potato-bean Apios priceana Т Reptiles Alligator Snapping Turtle Macrochelys temminckii ΡT Apr 15 – Sep 30

Choctaw Co	ounty			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Claiborne County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Birds	None			
Fishes	Bayou Darter	Etheostoma rubrum	Т	Year round
	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	РТ	Apr 15 – Sep 30

Г

Clarke Cou	IIIy		1	
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Clay County	/			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
-	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Coahoma County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Copiah County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Bayou Darter	Etheostoma rubrum	Т	Year round
	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15-Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Covington County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

DeSoto County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Non <del>e</del>			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Forrest County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т/СН	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Alabama Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Eastern Indigo snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Franklin County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

George County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Eastern Indigo Snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Greene County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Eastern Indigo Snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Grenada County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
	Whorled Sunflower	Helianthus verticillatus		Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

1

Г

Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	Mar 15 – Aug 15
	Piping Plover	Charadrius melodus	T/CH	Aug 15 – Mar 31
	Rufus Red Knot	Calidris canutus rufa	Т	Aug 15 – Mar 31
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Florida Manatee	Trichechus manatus latirostris	Т	Apr 15 – Dec 31
	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Louisiana Pigtoe	Pleurobema	PT	Low flow conditions
	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
-	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Green Sea Turtle	Chelonia mydas	Т	N/A
	Hawksbill Sea Turtle	Eretmochelys imbricata	E	N/A
-	Kemp's Ridley Sea Turtle	Lepidochelys kempii	E	N/A
	Leatherback Sea Turtle	Dermochelys coriacea	E	N/A
	Loggerhead Sea Turtle	Caretta caretta	Т	April 15 – Sep 15
ľ	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
ľ	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15- Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

п

Category	Species	Scientific Name	Status	<b>Optimal Survey Window</b>
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	Mar 15 – Aug 15
	Piping Plover	Charadrius melodus	T/CH	Aug 15 – Mar 31
	Rufa Red Knot	Calidris canutus rufa	T/CH	Aug 15 – Mar 31
	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т/СН	Mar 1 – Oct 15
Insects	None			
Mammals	Florida Manatee	Trichechus manatus latirostris	Т	Apr 15 – Dec 31
	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Alabama Red-bellied Turtle	Pseudemys alabamensis	E	May 15 – Aug 15
	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Green Sea Turtle	Chelonia mydas	Т	N/A
	Hawksbill Sea Turtle	Eretmochelys imbricata	E	N/A
	Kemp's Ridley Sea Turtle	Lepidochelys kempii	E	N/A
	Leatherback Sea Turtle	Dermochelys coriacea	E	N/A
	Loggerhead Sea Turtle	Caretta caretta	Т	April 15 – Sep 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Hinds County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Bayou Darter	Etheostoma rubrum	Т	Year round
	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions
	Louisiana Pigtoe	Pleurobema rubrum	PT	Low flow conditions
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
-	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Holmes County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Humphreys County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Issaquena County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Г

Itawamba County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	E	May 15 – Jun 30 or Aug 1 – Sep 30
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Gray Bat	Myotis grisescens	E	Year Round
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Alabama Moccasinshell	Medionidus acutissimus	Т/СН	Low flow conditions
	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions
	Black Clubshell	Pleurobema curtum	E	Low flow conditions
	Heavy Pigtoe	Pleurobema taitianum	E	Low flow conditions
	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Orangenacre Mucket	Lampsilis perovalis	Т/СН	Low flow conditions
	Ovate Clubshell	Pleurobema perovatum	E/CH	Low flow conditions
-	Southern Clubshell	Pleurobema decisum	E/CH	Low flow conditions
	Southern Combshell	Epioblasma penita	E	Low flow conditions
Plants	White Fringeless Orchid	Platanthera integrilabia	Т	Jul 1 – Sep 30
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Jackson County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	Mar 15 – Aug 15
	Mississippi Sandhill Crane	Grus canadensis pulla	E/CH	Year round
	Piping Plover	Charadrius melodus	T/CH	Aug 15 – Mar 31
	Red Knot	Calidris canutus rufa	Т	Aug 15 – Mar 31
	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Florida Manatee	Trichechus manatus latirostris	E	Apr 15 – Dec 31
	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Alabama Red-bellied Turtle	Pseudemys alabamensis	E	May 15 – Aug 15
	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Green Sea Turtle	Chelonia mydas	Т	N/A
	Eastern Indigo Snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Hawksbill Sea Turtle	Eretmochelys imbricata	E	N/A
	Kemp's Ridley Sea Turtle	Lepidochelys kempii	E	N/A
	Leatherback Sea Turtle	Dermochelys coriacea	E	N/A
	Loggerhead Sea Turtle	Caretta caretta	T/CH	April 15 – Sep 15
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Jasper County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Jefferson County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Jefferson D	avis County			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Jones County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Eastern Indigo Snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Kemper Co	unty			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Alabama hickorynut	Obovaria unicolor	PE	Low flow conditions
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Lafayette County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	None				
Plants	None				
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Lamar County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Category	Species	Scientific Name	Status	<b>Optimal Survey Window</b>
Amphibians	None			. ,
Birds	None			
Fishes	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions
Plants	None			
Reptiles	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Lawrence C	County			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т/СН	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
-	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 –Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	РТ	Apr 15 – Sep 30

Cotogony Species Scientific Name Status Ontimal Survey Window					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15	
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15	
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions	
Plants	None				
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15	
-	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Lee County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 - Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 - Oct 31
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Leflore County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	None				
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15	
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Lincoln County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3	
Fishes	None	Etheostoma rubrum	Т	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15	
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15	
Mussels	None				
Plants	None				
Reptiles	Pearl River Map Turtle	Graptemys pearlensis	т	May 15 – Aug 15	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Lowndes County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Alabama Moccasinshell	Medionidus acutissimus	T/CH	Low flow conditions
	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions
	Black Clubshell	Pleurobema curtum	E	Low flow conditions
	Heavy Pigtoe	Pleurobema taitianum	E	Low flow conditions
	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Orangenacre Mucket	Lampsilis perovalis	T/CH	Low flow conditions
	Ovate Clubshell	Pleurobema perovatum	E/CH	Low flow conditions
	Southern Clubshell	Pleurobema decisum	E/CH	Low flow conditions
F	Southern Combshell	Epioblasma penita	E	Low flow conditions
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
	White Fringeless Orchid	Platanthera integrilabia	Т	Jul 1 – Sep 30
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Madison Co	Madison County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15	
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15	
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	Т	Low flow conditions	
	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions	
Plants	None				
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15	
-	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Marion County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – March 31
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Louisiana Pigtoe	Pleurobema riddellii	PT	Low flow conditions
	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	None			
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
-	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Marshall County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Monroe County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	E	May 15 – Jun 30 or Aug 1 – Sep 30
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Alabama Moccasinshell	Medionidus acutissimus	T/CH	Low flow conditions
	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions
	Black Clubshell	Pleurobema curtum	E	Low flow conditions
	Heavy Pigtoe	Pleurobema taitianum	E	Low flow conditions
	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Orangenacre Mucket	Lampsilis perovalis	T/CH	Low flow conditions
	Ovate Clubshell	Pleurobema perovatum	E/CH	Low flow conditions
	Southern Clubshell	Pleurobema decisum	E/CH	Low flow conditions
	Southern Combshell	Epioblasma penita	E	Low flow conditions
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
F	White Fringeless Orchid	Platanthera integrilabia	Т	Jul 1 – Sep 30
ľ	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Montgomery County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
-	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Round Hickorynut	Obovaria subrotunda	PT/PCH	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Neshoba Co	ounty			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Newton County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Pearl Darter	Percina aurora	Т/СН	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Noxubee County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3	
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions	
	Southern Clubshell	Pleurobema decisum	E/CH	Low flow conditions	
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Oktibbeha County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Panola County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 1
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т/СН	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Louisiana Pigtoe	Pleurobema riddellii	PT/PCH	Low flow conditions
	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	Т	Mar 15 – Sep 30
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	РТ	Apr 15 – Sep 30

Perry County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	Т/СН	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Eastern Indigo Snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Г

Category	Species	Scientific Name	Status	<b>Optimal Survey Window</b>
Amphibians	None			
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Alabama Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Pontotoc County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	None				
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31	
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Prentiss County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Whooping Crane	Grus americana	Т	Nov 1 to March 15	
Fishes	None				
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	E	May 15 – Jun 30 or Aug 1 – Sep 30	
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15	
	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Gray Bat	Myotis grisescens	E	Year round	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	None				
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31	
-	White Fringeless Orchid	Platanthera integrilabia	Т	Jul 1 – Sep 30	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Quitman County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	None				
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Rankin County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т/СН	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Louisiana Pigtoe	Pleurobema riddellii	PT	Low flow conditions
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
-	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 - Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Scott County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Sharkey Co	Sharkey County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15	
-	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15	
	Fat Pocketbook	Potamilus capax	E	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Simpson County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Smith Cour	nty			
Category	Species	Scientific Name	Status	<b>Optimal Survey Window</b>
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15- Aug 15
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Stone County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31	
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3	
Fishes	Pearl Darter	Percina aurora	T/CH	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15	
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15	
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions	
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall	
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30	
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Sunflower County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Tallahatchie County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
-	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Tate County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Tippah County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Eastern Hellbender	Cryptobranchus alleganiensis alleganiensis	PE	Low flow conditions
Birds	Whooping Crane	Grus americana	E	Nov 1 to March 15
Fishes	None			
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	E	May 15 – Jun 30 or Aug 1 – Sep 30
Mammals	Gray Bat	Myotis grisescens	E	Year round
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15
	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Cumberlandian Combshell	Epioblasma brevidens	E/CH	Low flow conditions
	Cumberlandian moccasinshell	Medionidus conradicus	PE	Low flow conditions
	Oyster Mussel	Epioblasma capsaeformis	E/CH	Low flow conditions
	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions
	Slabside Pearlymussel	Pleuronaia dolabelloides	E/CH	Low flow conditions
	Snuffbox	Epioblasma triquetra	E	Low flow conditions
	Pink Mucket	Lampsilis abrupta	E	Low flow conditions
	Longsolid	Fusconaia subrotunda	Т	Low flow conditions
	Alabama Lampmussel	Lampsilis virescens	E	Low flow conditions
	Tennessee Pigtoe	Pleuronaia barnesiana	PE	Low flow conditions
Plants	White Fringeless Orchid	Platanthera integrilabia	Т	Jul 1 – Sep 30
	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15
	Tennessee Yellow-eyed Grass	Xyris tennesseensis	E	
Reptiles	None			

Tunica County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Union Coun	ity			Union County				
Category	Species	Scientific Name	Status	<b>Optimal Survey Window</b>				
Amphibians	None							
Birds	None							
Fishes	None							
Insects	None							
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15				
	Indiana Bat	Myotis sodalis	E	May 15 – Aug 15				
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15				
Mussels	None							
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31				
-	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15				
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30				

Walthall County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	None			
Plants	None			
Reptiles	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Warren County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Washingtor	Washington County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	None				
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15	
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15	
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Wayne County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/CH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15
Mussels	Undescribed Hickorynut	Obovaria cf. unicolor	PT	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	Mar 15 – Sep 30
	Eastern Indigo Snake	Drymarchon couperi	Т	Oct 1 – Mar 14
	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Webster County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	None			Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Wilkinson County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	Т	Apr 1 – Jun 3
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 15 – Oct 15
	Tricolored Bat	Perimyotis subflavus	PE	Mar 15 – Oct 15
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Wilkinson County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Winston Co	ounty		•	
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15
Mussels	Alabama Hickorynut	Obovaria unicolor	PE	Low flow conditions
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Yalobusha County						
Category	Species	Scientific Name	Status	Optimal Survey Window		
Amphibians	None					
Birds	None					
Fishes	None					
Insects	None					
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	May 15 – Aug 15		
	Tricolored Bat	Perimyotis subflavus	PE	May 15 – Aug 15		
Mussels	None					
Plants	Whorled Sunflower	Helianthus verticillatus	E	Aug 15 – Oct 15		
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30		

Yazoo County						
Category	Species	Scientific Name	Status	Optimal Survey Window		
Amphibians	None					
Birds	None					
Fishes	None					
Insects	None					
Mammals	Northern Long-eared Bat	Myotis septentrionalis	E	Mar 1 – Oct 15		
	Tricolored Bat	Perimyotis subflavus	PE	Mar 1 – Oct 15		
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions		
Plants	Pondberry	Lindera melissifolia	E	Feb 15 – Apr 1; Sep 1 –Nov 15		
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30		