



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

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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 species, critical habitats, and county distributions of listed species found in Mississippi. Additionally, we have provided optimal survey timeframes for listed species should a survey be required for your project. For all federally funded projects that 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 a streamlined programmatic consultation for projects covered under the Northern Long-eared Bat 4(d) rule, where project managers can instantly assess impacts to this species and determine whether further consultation is required by our office. 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.

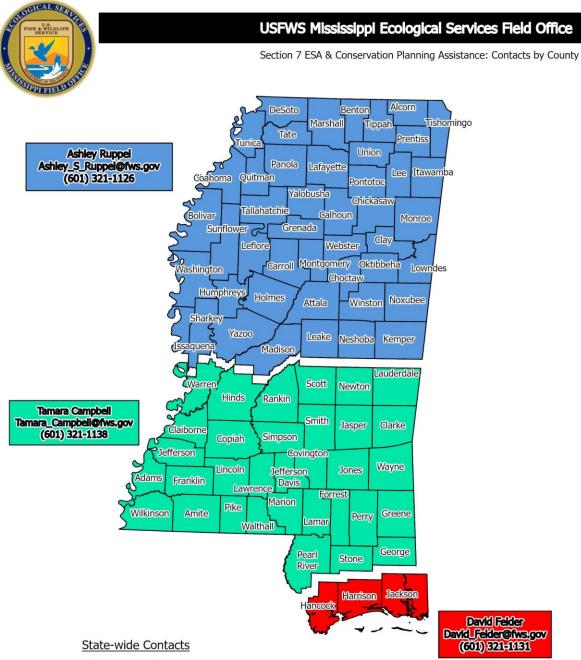
How to Submit Projects for Consultation

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

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



Transportation Projects
Alison McCartney (601) 455-8780; Alison_McCartney@fws.gov
U.S. Forest Service Projects
Eli Polzer (601) 540-7663; Eli_Polzer@fws.gov
Coastal Beach Zone
Paul Necaise (228) 493-6631; Paul_Necaise@fws.gov

FEDERALLY THREATENED AND ENDANGERED SPECIES OF MISSISSIPPI

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

June 2022

Common Name	Scientific Name	Status
Plants (6)		
Price's Potato-bean	Apios priceana	T
Whorled Sunflower	Helianthus verticillatus	E
Louisiana Quillwort	Isoetes louisianensis	Е
Pondberry	Lindera melissifolia	E
White Fringeless Orchid	Platanthera integrilabia	T
American Chaffseed	Schwalbea americana	H (E)
Mussels (18)		
Pyramid Pigtoe	Pleurobema rubrum	PT
Cumberlandian Combshell	Epioblasma brevidens	E/CH
Oyster Mussel	Epioblasma capsaeformis	E/CH ¹
Southern Combshell	Epioblasma penita	Е
Snuffbox	Epioblasma triquetra	E
Orange-nacre Mucket	Lampsilis (=Hamiota) perovalis	T/CH
Alabama Moccasinshell	Medionidus acutissimus	T/CH
Round Hickorynut ²	Obovaria subrotunda	PT/PCH
Sheepnose Mussel	Plethobasus cyphyus	E
Black Clubshell	Pleurobema curtum	E
Southern Clubshell	Pleurobema decisum	E/CH
Ovate Clubshell	Pleurobema perovatum	T/CH
Flat Pigtoe	Pleurobema marshalli	H (E)
Heavy Pigtoe	Pleurobema taitianum	E
Slabside Pearlymussel	Pleuronaia (=Lexingtonia) dolabelloides	E/CH
Fat Pocketbook	Potamilus capax	E
Inflated Heelsplitter	Potamilus inflatus	T
Rabbitsfoot	Quadrula cylindrica (=Theliderma) cylindrica	T/CH
Stirrupshell	Quadrula (=Theliderma) stapes	H (E)
Insects (2)	· · · · ·	
Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	Е
American Burying Beetle	Nicrophorus americanus	H (T)
Fishes (5)		
Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH
Bayou Darter	Etheostoma rubrum	T
Pearl Darter	Percina aurora	T/PCH
Snail Darter	Percina tanasi	T
Pallid Sturgeon	Scaphirhynchus albus	E
Amphibians (1)		
Dusky Gopher Frog	Rana sevosa	E/CH
Reptiles (11)		
Loggerhead Sea Turtle	Caretta caretta	T/CH
Green Sea Turtle	Chelonia mydas	T
Leatherback Sea Turtle	Dermochelys comacea	E
Eastern Indigo Snake	Drymarchon couperi	H (T)

Hawksbill Sea Turtle	Eretmochelys imbricata	Е
Gopher Tortoise	Gopherus polyphemus	Т
Yellow-blotched Map Turtle	Graptemys flavimaculata	T
Ringed Map Turtle	Graptemys oculifera	T
Pearl River Map Turtle	Graptemys pearlensis	PT
Kemp's Ridley Sea Turtle	Lepidochelys kempii	E
Alligator Snapping Turtle	Macrochelys temminckii	PT
Black Pinesnake ³	Pituophis melanoleucus lodingi	T/CH
Alabama Red-bellied Turtle	Pseudemys alabamensis	E
Birds (8)		_
Red Knot	Calidris canutus rufa	T/PCH
Ivory-billed Woodpecker	Campephilus principalis	H (E)
Piping Plover	Charadrius melodus	T/CH
Mississippi Sandhill Crane	Grus canadensis pulla	E/CH
Eastern Black Rail ³	Laterallus jamaicensis jamaicensis	T
Wood Stork	Mycteria americana	T
Red-cockaded Woodpecker ⁴	Picoides (=Leuconotopicus) borealis	E/PT
Bachman's Warbler	Vermivora bachmanii	H (E)
Mammals (4)		
Gray Bat	Myotis grisescens	E
Northern Long-eared Bat ³	Myotis septentrionalis	T/PE
Indiana Bat	Myotis sodalis	E
West Indian Manatee	Trichechus manatus	E

¹Critical habitat only, species documented only in Alabama portions of Bear Creek.

²Proposed for listing with 4(d) rule.

³Species with 4(d) rule.

⁴Proposed for downlisting as threatened with 4(d) rule.

⁺Genus1 (=Genus2) species: where Genus1 represents genus listed in the Federal Register; Genus2 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 or proposed 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.

C = Candidate, D = Discretionary Review, P = Petitioned PS = Mississippi Priority Species

Common Name	Scientific Name	Status
Plants (4)		
Impressed-nerve (Ravine) Sedge	Carex impressinervia	Р
Bog Spicebush	Lindera subcoriacea	Р
Boykin's Lobelia	Lobelia boykinii	Р
Wherry's Sweet Pitcherplant	Sarracenia rubra ssp. wherryi¹	Р
Mussels (9)		
Rayed Creekshell	Anodontoides (=Strophitus) radiatus	Р
Western Fanshell	Cyprogenia aberti	Р
Alabama Spike	Elliptio arca	Р
Delicate Spike	Elliptio arctata	P <u>T</u>
Longsolid	Fusconaia subrotunda	PT
Round Hickorynut	Obovaria subrotunda	PT
Alabama Hickorynut	Obovaria unicolor	Р
Pyramid Pigtoe	Pleurobema rubrum	P <u>T</u>
Tennessee Pigtoe	Pleuronaia <u>(Fusconaia)</u> barnesiana²	Р
Insects (6)		
American Bumble Bee	Bombus pensylvanicus	Р
Monarch Butterfly	Danaus plexippus plexippus	С
Gulf Coast Solitary Bee	Hesperapis oraria	Р
Morse's Little Plain Brown Sedge	Lepidostoma morsei	Р
Southern Snaketail	Ophiogomphus australis	Р
Yellow-sided Clubtail	Stylurus potulentus	Р
Crayfish (9)		
Speckled Burrowing Crayfish	Fallicambarus (=Creaserinus) danielae³	Р
Crested Riverlet Crayfish	Hobbseus cristatus	Р
Oktibbeha Riverlet Crayfish	Hobbseus orconectoides	Р
Tombigbee Riverlet Crayfish	Hobbseus petilus	Р
Yalobusha Riverlet Crayfish	Hobbseus yalobushensis	Р
Yazoo Crayfish	Orconectes (=Faxonius) hartfieldi⁴	Р
Hardin Crayfish	Orconectes wrighti	Р
Jackson Prairie Crayfish	Procambarus barbiger	Р
Spinytail Crayfish	Procambarus fitzpatricki	Р

Fish (7)		
Lake Sturgeon	Acipenser fulvescens	Р
Yoknapatawpha Darter	Etheostoma faulkneri	PS
Yazoo Darter	Etheostoma raneyi	PS
Saltmarsh Topminnow⁵	Fundulus jenkinsi	Р
Sturgeon Chub ⁶	Macrhybopsis gelida	Р
Sicklefin Chub	Macrhybopsis meeki	Р
Piebald Madtom	Noturus gladiator	Р
Reptiles (7)		
Eastern Diamondback Rattlesnake	Crotalus adamanteus	Р
Western Chicken Turtle	Deirochelys reticularia ssp. miaria	Р
Pascagoula Map Turtle	Graptemys gibbonsi [¬]	P <u>T</u>
Black-knobbed Map Turtle	Graptemys nigrinoda	Р
Pearl River Map Turtle	Graptemys pearlensis ⁷	P <u>T</u>
Alabama Map Turtle	Graptemys pulchra	P <u>T</u>
Alligator Snapping Turtle	Macrochelys temminckii	P <u>T</u>
Birds (1)		
Golden-winged Warbler	Vermivora chrysoptera	Р
Mammals (2)		
Little Brown Bat	Myotis lucifugus	D
Tricolored Bat	Perimyotis <u>(Pipistrellus)</u> subflavus	Р

¹Synonymous with *Sarracenia alabamensis* ssp. *wherryi*.

RECOMMENDATIONS FOR SELECT AT-RISK SPECIES

Monarch Butterfly

The Monarch Butterfly (*Danaus plexippus*) is a candidate species and not yet listed or proposed for listing under the Endangered Species Act. There are no section 7 requirements for candidate species; however, we encourage federal agencies to take advantage of any opportunity they may have to conserve the species. For additional guidance, visit https://www.fws.gov/savethemonarch/.

²Petitioned as *Fusconaia barnesiana*.

³Petitioned as *Fallicambarus danielae*.

⁴Petitioned as *Orconectes hartfieldi*.

⁵Formerly designated as a NOAA NMFS Species of Concern.

⁶Noted in WildEarth Guardians 2016 petition that species is historic to Mississippi (Lower Mississippi River).

⁷Split from *Graptemys gibbonsi* (petitioned) in 2010. *Graptemys pearlensis* was not explicitly referenced in Center for Biological Diversity *et al.* 2010 petition, but range (as *G. gibbonsi*) was referenced in the petition.

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.

Common Name	Scientific Name	Delisting Date
American Bald Eagle ^{1,2}	Haliaeetus leucocephalus	2007
Brown Pelican ²	Pelecanus occidentalis	2009
Interior Least Tern ²	Sterna antillarum	2021
Louisiana Black Bear	Ursus americanus luteolus	2016

¹Although 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.

²Continues to be protected under the Migratory Bird Treaty Act.

FEDERALLY THREATENED AND ENDANGERED SPECIES AND HABITAT DESCRIPTIONS

PLANTS

Louisiana Quillwort

The 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 spore-bearing structures below ground. 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 their 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 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 (February to March); however, surveys are still possible later in the season following leaf-out and into the fruiting season (late summer-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 known site 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 included habitat destruction, population fragmentation, altered hydrologic regimes, 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 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-ways. These areas are typically underlain by alkaline soils and calcareous parent 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*) and 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 Price's Price's Potato-bean.

White Fringeless Orchid

The 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. Leaves decrease in size from the base to the top of the stem, have alternate arrangement, are narrowly elliptic to lanceolate in shape, and have entire margins. Flowers are white and borne in a loose cluster at the end of the stem. The flower's lower petal (the lip) does not have a conspicuous fringe along the margin but may be slightly toothed. A prominent green to white spur (growing to nearly 2.5 inches) protrudes from the underside of each flower. Flowering occurs from July to September and fruiting capsules mature in October. 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. Surveys should be conducted when plants are in bloom, as the species is difficult to distinguish from the more common *Platanthera* species without flowers. Threats include habitat destruction and modification from development, incompatible forestry practices, alteration of hydrologic regimes, incompatible right-of-way maintenance, invasive species competition, and disturbance by feral hogs. Other threats include herbivory by deer and feral hogs, as well as over-collection. View ECOS species profile for White Fringeless Orchid.

Whorled Sunflower

The endangered Whorled Sunflower (*Helianthus verticillatus*), a member of the aster family (Asteraceae [=Compositae]), is a tall (growing to over 15 feet tall), rhizomatous, perennial herbaceous plant. The firm, linear to lanceolate leaves have a prominent mid-vein, lack prominent lateral veins, are short-petioled to nearly sessile, and can grow to over 7 inches long. Leaf arrangement is opposite on the lower stem, whorled (verticillate) in groups of 3 or 4 (to 6) along the mid-stem, and alternate or opposite near the top. The stem is smooth, waxy (glaucous), and has a bluish tint during the growing season. Flowering occurs from mid- to late August into October. Flowers are arranged in branched inflorescences (cymes) 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

<u>Alabama Moccasinshell, Black Clubshell, Heavy Pigtoe, Orange-nacre Mucket, Ovate Clubshell, Southern Clubshell, and Southern Combshell</u>

Seven federally listed mussel species are found within the Tombigbee, Luxapallila, and Buttahatchie Rivers; and Bull Mountain Creek. Two of these species (Southern Clubshell and Southern Combshell) can be found in the Noxubee River. The endangered Heavy Pigtoe (*Pleurobema taitianum*), the endangered Southern Combshell (*Epioblasma penita*), the endangered Southern Clubshell (*Pleurobema decisum*), the endangered Ovate Clubshell (*Pleurobema perovatum*), the endangered Black Clubshell (*Pleurobema curtum*), the threatened Alabama Moccasinshell (*Medionidus acutissimus*), and the threatened Orangenacre Mucket (*Lampsilis perovalis*) all 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. Critical habitat has been designated for the Alabama Moccasinshell, Orange-nacre Mucket, Ovate Clubshell, and Southern Clubshell in Itawamba, Lowndes, and Monroe Counties. View ECOS species profile for the Alabama Moccasinshell, Black Clubshell, Heavy Pigtoe, Orange-nacre Mucket, Ovate Clubshell, Southern Clubshell, and Southern Combshell.

<u>Cumberlandian Combshell, Oyster Mussel, Slabside Pearlymussel, and Snuffbox</u>

The endangered Cumberlandian Combshell (*Epioblasma brevidens*), Oyster Mussel (*Epioblasma capsaeformis*), Slabside Pearlymussel (*Lexingonia dolabelloides*), and Snuffbox (*Epioblasma triquetra*) are found in the Bear Creek watershed. Work activities that alter flow, channel geometry, or increase sedimentation and water turbidity could have adverse impacts on these species. All of Bear Creek in Tishomingo County is designated as critical habitat for the Cumberlandian Combshell, Oyster Mussel, and Slabside Pearlymussel. It should be noted that the Oyster Mussel has only been documented in the Alabama portion of Bear Creek, however, critical habitat is designated for the species in Mississippi. View ECOS species profile for the *Cumberlandian Combshell*, *Oyster Mussel*, *Slabside Pearlymussel*, and *Snuffbox*.

Fat Pocketbook

The endangered Fat Pocketbook (*Potamilus capax*) is found in the Mississippi River and associated tributaries. 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 Freshwater Drum (*Aplodinotus grunniens*). Fat pocketbook may be affected by dredging or channel clearing activities, excessive sedimentation, channel erosion, and pollutants. View ECOS species profile for the Fat Pocketbook.

<u>Inflated Heelsplitter</u>

The threatened Inflated Heelsplitter (*Potamilus inflatus*) is found in the lower Pearl River and Tombigbee watersheds. 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. Work activities that increase sedimentation and water turbidity or alter channel geometry or flow could have adverse impacts on this species. View ECOS species profile for the Inflated Heelsplitter.

Pyramid Pigtoe

The Pyramid Pigtoe (*Pleurobema rubrum*) is found in the middle Sunflower River upstream of Indianola, Misssippi and in the Big Black River in Hinds and Warren counties. It inhabits clay (Sunflower River) and clay-gravel (Big Black River) substrates in flowing water of depths ranging from less than three feet to over 20 feet. The Pyramid Pigtoe was proposed as threatened in September 2021. Current threats include habitat degradation and fragmentation from dams and resource extraction, direct mortality from dredging, introduction of invasive and nonnative species, and reduced water quality from chemical contamination and erosion due to development, agriculture, and mining. View ECOS species profile for the <u>Pyramid Pigtoe</u>.

Rabbitsfoot

The threatened Rabbitsfoot (*Quadrula cylindrica cylindrica*), is found in the Bear Creek, Big Sunflower River, and Big Black River watersheds. Population declines can be attributed to channel erosion, waterquality degradation, loss of stable substrates, sedimentation, channelization, gravel mining, dredging, impoundments, and competition of exotic mussel species. 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 Rabbitsfoot.

Round Hickorynut

The Round Hickorynut (*Obovaria subrotunda*) was proposed for listing as threatened on September 29, 2020. It is a wide-ranging species, currently found in the Great Lakes, Ohio, Cumberland, Tennessee, and Lower Mississippi River basins. The species lives 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 proposed 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 Round Hickorynut.

Sheepnose Mussel

The endangered Sheepnose Mussel (*Plethobasus cyphyus*) is a larger stream species occurring primarily in shallow shoal habitats with moderate to swift currents over coarse sand and gravel. 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. Although no juvenile mussels have been found in recent sampling efforts, variably sized individuals indicate some, possibly very low, 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>.

INSECTS

Mitchell's Satyr Butterfly

The 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.

FISHES

Bayou Darter

The threatened Bayou Darter (*Etheostoma rubrum*) 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 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 in-stream-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 have various threats such as gravel mining, stream fords, ATV traffic, and non-point and point source pollution. View ECOS species profile for the <u>Bayou Darter</u>.

Gulf Sturgeon

The threatened Atlantic sturgeon, Gulf subspecies (*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). 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 Gulf Sturgeon.

Pallid Sturgeon

The endangered Pallid Sturgeon (*Scaphirhynchus albus*) is found throughout the lower Mississippi River. 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. View ECOS species profile for the Pallid Sturgeon.

Pearl Darter

The threatened Pearl Darter (*Percina aurora*) was historically found in the Pearl and Pascagoula River systems. Currently, it is found only in the Pascagoula River system. 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 due to its localized distribution within one river drainage and its apparent low population sizes. Critical habitat has been proposed for the Pascagoula River watershed (including the Bouie, Chickasawhay, and Leaf Rivers) and Strong River (Pearl River watershed; July 13, 2021). View ECOS species profile for the <u>Pearl Darter</u>.

Snail Darter

The threatened Snail Darter (*Percina tanasi*) was recently (2015) discovered within Bear Creek in Tishomingo County. The previous distribution included the upper Tennessee River drainage of eastern Tennessee, northern Georgia, and Alabama. Snail darter inhabit gravel or sandy shoals in large creeks and rivers with low degrees of turbidity or siltation. Threats to this species include non-sustainable agricultural practices, environmental contamination and pollution, pesticides, channel modification, habitat inundation (reservoirs), and siltation. The species is currently proposed for delisting (September 1, 2021). View ECOS species profile for the <u>Snail Darter</u>.

AMPHIBIANS

Dusky Gopher Frog

The endangered Dusky Gopher Frog (*Rana sevosa*), formerly called the Mississippi Gopher Frog, historically was widely distributed in the southern counties of Mississippi. 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>.

REPTILES

Alabama Red-bellied Turtle

The 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 Alabama Red-bellied Turtle.

Alligator Snapping Turtle

The Alligator Snapping Turtle (*Macrochelys temminckii*) is a large freshwater turtle that is currently being proposed for listing as threatened throughout 14 states in the Southeast and Midwest United States (November 8, 2021; Federal Resister FWS-R4-ES-2021-0115). They are generally found 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. View ECOS species profile for the Alligator Snapping Turtle.

Black Pinesnake

The threatened Black Pinesnake (*Pituophis melanoleucus lodingi*) prefers uplands with well-drained, sandy soils in pine-dominated forests, particularly longleaf pine. Using prescribed fire and other beneficial practices to maintain an open-canopied forest with abundant herbaceous groundcover is essential to maintain prey base and basking opportunities; additionally, leaving stumps intact during forestry activities is important so they may naturally burn or rot out and provide the root system refugia that pinesnakes utilize. Critical habitat is found 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 threatened Eastern Indigo Snake (*Drymarchon couperi*) prefers upland habitat types (e.g. longleaf 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 Snake use belowground 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 Snake 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 Eastern Indigo Snake.

Gopher Tortoise

The threatened Gopher Tortoise (*Gopherus polyphemus*) occupies a wide range of upland habitat types; most frequently, the longleaf pine ecosystem. The general physical and biotic features thought to characterize suitable tortoise habitat are presence of well-drained, sandy soils, which allow easy burrowing; an abundance of diverse herbaceous ground cover; and an open canopy and sparse shrub cover, which allows sunlight to reach the ground. 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) and habitat fragmentation (often attributed to urbanization and agricultural/silvicultural conversion), which can result in forage reduction, direct human impacts, and reproductive isolation. View ECOS species profile for the Gopher Tortoise.

Pearl River Map Turtle

The Pearl River Map Turtle (*Graptemys pearlensis*) is currently being proposed as threatened throughout the Pearl River system in Mississippi and Louisiana (January 22, 2022; FR FWS-R4-2021-0097). 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 Pearl River Map Turtle.

Ringed Map Turtle

The threatened Ringed Map Turtle (*Graptemys oculifera*) is found in the Pearl River. It prefers 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 Ringed Map Turtle.

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

There are five species of federally protected sea turtles that inhabit the Gulf of Mexico waters along the Mississippi coast: the Leatherback (*Dermochelys coriacea*), Loggerhead (*Caretta caretta*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*) and Kemp's Ridley (*Lepidochelys kempii*). Although these are predominantly marine animals, they can come ashore to nest on barrier island and mainland beaches. Currently, only the loggerhead is known to nest in Mississippi. Mortality due to fishing nets and trawls, ingestion of inedible objects, and nest predation has 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 threatened Yellow-blotched Map Turtle (*Graptemys flavimaculata*) is found 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 threatened Eastern Black Rail (*Laterallus jamaicensis jamaicensis*) is a small, secretive marsh dependent 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 may be found in coastal marshes during the winter months (i.e., non-nesting 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 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 Mississippi Sandhill Crane.

Piping Plover

The 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 Piping Plover.

Red-cockaded Woodpecker

The endangered Red-cockaded Woodpecker (*Picoides borealis*) excavates nesting cavities in mature and old growth pine trees (60+ years old). Red-cockaded Woodpecker 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. The Service is currently proposing to downlist or reclassify this species from endangered to threatened with 4(d) rule under the ESA. View ECOS species profile for the Red-cockaded Woodpecker.

Red Knot

The Red Knot (*Calidris canutus rufa*), a threatened species, 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 Red Knot can be found in Mississippi during the winter months (generally October to March). In the southeastern United States, Red Knot forage along sandy beaches, tidal mudflats, salt marshes, and peat banks. Observations along the Texas coast indicate that 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, Red Knot commonly forage on bivalves, gastropods, and crustaceans. Coquina Clam (*Donax variabilis*), a frequent and often important food resource for 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 has been proposed for Ship and Cat Islands (July 15, 2021). View ECOS species profile for the Red Knot.

Wood Stork

Wood stork (*Mycteria americana*) are large, long-legged wading birds, about 50 inches tall, with a wingspan of 60 – 65 inches. The plumage is white except for black primaries and secondaries, and a short black tail. The head and neck are largely unfeathered and dark gray in color. Two distinct populations of Wood Stork occur in the United States. One population breeds in Florida, Georgia, and South Carolina, and is federally protected (threatened). The other population breeds from Mexico to northern Argentina and is not federally protected. Wood Stork from each of these populations occur seasonally in Mississippi during the non-breeding season (May – October) and are not distinguishable from one another. The major threat to this species is a reduction in food base (primarily small fish) due to habitat loss, modification, and fragmentation. Typical foraging sites include freshwater marshes, swales, ponds, hardwood and cypress swamps, narrow tidal creeks or shallow tidal pools, and artificial wetlands (such as stock ponds; shallow, seasonally flooded roadside or agricultural ditches; and impoundments). View ECOS species profile for the <u>Wood Stork</u>.

MAMMALS

Gray Bat

The endangered Gray Bat (*Myotis grisescens*) is a historical resident of Tishomingo County. They are the only listed bat species in Mississippi that roost year-round in caves. 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 <u>Gray Bat</u>.

Indiana Bat

The 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 Bat in Mississippi is the destruction of maternity and foraging habitats; therefore, we recommend that all tree removal activities in areas supporting Indiana Bat habitat take place in the non-maternity season (September 1 – May 14). Range-wide Indiana Bat Survey Guidelines can be found at https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html. View ECOS species profile for the https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html. View

Northern Long-eared Bat

The Northern Long-eared Bat (*Myotis septentrionalis*; NLEB) was listed as threatened on May 4, 2015. The 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, Northern Long-eared Bat 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.

A final 4(d) rule was published in 2016 exempting incidental take of otherwise legal actions related to tree clearing, except when tree removal occurs within a hibernacula site or when tree removal activities: 1) occur within a quarter-mile of a known hibernacula; or 2) cut or destroy known occupied maternity roost trees, or any other trees within 150 feet of that maternity roost tree during the pup-rearing season (June 1 – July 31). Currently, there are no known maternity roost trees in the state of Mississippi, and only one known hibernaculum located in Tishomingo County near Pickwick Lake. Confirmed records of NLEB are also known from Wilkinson and Sharkey Counties, though no hibernacula or maternity roost locations were identified for these individuals.

To evaluate the impacts of proposed projects on the NLEB you may submit this project online using the IPac Website. Here you will be able to navigate the NLEB effects determination key and receive an automated verification letter for your records. View ECOS species profile for the NLEB.

West Indian Manatee

The threatened West Indian Manatee (*Trichechus manatus*) is an aquatic mammal that occurs in rivers, estuaries, and coastal areas of the Gulf of Mexico. 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 West Indian Manatee.

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

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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	Е	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	Е	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
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 31
	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	None			
Mussels	None			
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Round Hickorynut		PT	Low flow conditions
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Benton County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 31
	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	Е	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	Е	Low flow conditions
	Rabbitsfoot	Quadrula cylindrica cylindrica	Е	Low flow conditions
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions
	Pyramid Pigtoe	Pleurobema rubrum	PT	Low flow conditions
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – Nov 15

Bolivar County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Calhoun County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Round Hickorynut	Obovaria subrotunda	PT	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Chickasaw County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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

Choctaw County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Round Hickorynut	Obovaria subrotunda	PT	Low flow conditions
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15 – Aug 15
	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	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	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
	Rabbitsfoot	Quadrula cylindrica cylindrica	Е	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Clarke County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	None			
Mussels	None			

Clarke County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Alabama Moccasinshell	Medionidus acutissimus	Т	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	
-	Orange-nacre Mucket	Lampsilis perovalis	Т	Low flow conditions	
-	Ovate Clubshell	Pleurobema perovatum	Т	Low flow conditions	
	Southern Clubshell	Pleurobema decisum	E	Low flow conditions	
	Southern Combshell	Epioblasma penita	E	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	

Coahoma County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions
	Pyramid Pigtoe	Pleurobema rubrum	PT	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Copiah Cou	inty			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Bayou Darter	Etheostoma rubrum	Т	Year round
	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	None			
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	None			
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	

DeSoto County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Mussels	Fat Pocketbook	Potamilus capax	Е	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – 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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	None			
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
	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 Co	Franklin County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3	
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	None				
Mussels	None				
Plants	None				
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

George County				
Species	Scientific Name	Status	Optimal Survey Window	
Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31	
Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3	
Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
None				
Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15	
Pearl Darter	Percina aurora	T/PCH	Year round	
None				
None				
None				
Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall	
Black Pinesnake	Pituophis melanoleucus lodingi	T/CH	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	
	Dusky Gopher Frog Red-cockaded Woodpecker Wood Stork None Gulf Sturgeon Pearl Darter None None Louisiana Quillwort Black Pinesnake Gopher Tortoise Yellow-blotched Map Turtle	Dusky Gopher Frog Rana sevosa Red-cockaded Woodpecker Picoides borealis Wood Stork Mycteria americana None Gulf Sturgeon Acipenser oxyrinchus desotoi Pearl Darter Percina aurora None None None Louisiana Quillwort Isoetes louisianensis Black Pinesnake Pituophis melanoleucus lodingi Gopher Tortoise Gopherus polyphemus Yellow-blotched Map Turtle Graptemys flavimaculata	Dusky Gopher Frog Rana sevosa E/CH Red-cockaded Woodpecker Picoides borealis E/PT Wood Stork Mycteria americana T None Gulf Sturgeon Acipenser oxyrinchus desotoi T/CH Pearl Darter Percina aurora T/PCH None None Louisiana Quillwort Isoetes Iouisianensis E Black Pinesnake Pituophis melanoleucus Iodingi T/CH Gopher Tortoise Gopherus polyphemus T Yellow-blotched Map Turtle Graptemys flavimaculata T	

Greene Cou	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	E/PT	Apr 1 – Jun 3	
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15	
	Pearl Darter	Percina aurora	T/PCH	Year round	
Insects	None				
Mammals	None				
Mussels	None				
Plants	Louisiana Quillwort	Isoetes louisianensis	Е	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	
	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – Nov 15
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	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	
	Piping Plover	Charadrius melodus	T/CH	Aug 15 – Mar 31
	Red Knot	Calidris canutus rufa	Т	Aug 15 – Mar 31
-	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	West Indian Manatee	Trichechus manatus	Е	Apr 15 – Dec 31
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
Plants	Louisiana Quillwort	Isoetes louisianensis	Е	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
Ī	Green Sea Turtle	Chelonia mydas	Т	
	Hawksbill Sea Turtle	Eretmochelys imbricata	Е	
	Kemp's Ridley Sea Turtle	Lepidochelyis kempii	Е	
Ī	Leatherback Sea Turtle	Dermochelys coriacea	Е	
	Loggerhead Sea Turtle	Caretta caretta	Т	April 15 – Sep 15
	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15- Aug 15
	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	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	
	Piping Plover	Charadrius melodus	T/CH	Aug 15 – Mar 31
	Red Knot	Calidris canutus rufa	T/PCH	Aug 15 – Mar 31
	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	West Indian Manatee	Trichechus manatus	Е	Apr 15 – Dec 31
Mussels	None			
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Alabama Red-bellied Turtle	Psuedemys alabamensis	Е	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	
	Hawksbill Sea Turtle	Eretmochelys imbricata	E	
	Kemp's Ridley Sea Turtle	Lepidochelyis kempii	E	
	Leatherback Sea Turtle	Dermochelys coriacea	E	
	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	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	Т	May 15 – Aug 31	
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions	
	Pyramid 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	PT	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Round Hickorynut	Obovaria subrotunda	PT	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – Nov 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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	Т	Low flow conditions	
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions	
	Pyramid Pigtoe	Pleurobema rubrum	PT	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – Nov 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PY	Apr 15 – Sep 30	

Issaquena County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	Е	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	Е	Low flow conditions
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Itawamba County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	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	Т	May 15 – Aug 31	
Mussels	Alabama Moccasinshell	Medionidus acutissimus	T/CH	Low flow conditions	
	Black Clubshell	Pleurobema curtum	Е	Low flow conditions	
	Heavy Pigtoe	Pleurobema taitianum	Е	Low flow conditions	
	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions	
	Orange-nacre 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	Е	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	PT	
	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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	West Indian Manatee	Trichechus manatus	E	Apr 15 – Dec 31
Mussels	None			
Plants	Louisiana Quillwort	Isoetes louisianensis	E	Nov 1 – May 31; Sufficient rainfall
Reptiles	Alabama Red-bellied Turtle	Psuedemys alabamensis	Е	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	

Jackson County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
	Hawksbill Sea Turtle	Eretmochelys imbricata	E		
	Kemp's Ridley Sea Turtle	Lepidochelyis kempii	E		
	Leatherback Sea Turtle	Dermochelys coriacea	Е		
	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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	None			
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	E/PT	Apr 1 – Jun 3	
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Bayou Darter	Etheostoma rubrum	Т	Year round	
	Pallid Sturgeon	Scaphirhynchus albus	Е	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Fat Pocketbook	Potamilus capax	Е	Low flow conditions	
Plants	None				
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Jefferson Davis County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	None			
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 Cour	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	E/PT	Apr 1 – Jun 3		
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31		
Crayfishes	None					
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15		
	Pearl Darter	Percina aurora	T/PCH	Year round		
Insects	None					
Mammals	None					
Mussels	None					
Plants	Louisiana Quillwort	Isoetes louisianensis	Е	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		
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15		
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30		

Kemper County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				

Kemper Co	Kemper County					
Category	Species	Scientific Name	Status	Optimal Survey Window		
Insects	None					
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31		
Mussels	Alabama Moccasinshell	Medionidus acutissimus	Т	Low flow conditions		
	Orange-nacre Mucket	Lampsilis perovalis	Т	Low flow conditions		
	Ovate Clubshell	Pleurobema perovatum	Е	Low flow conditions		
	Southern Combshell	Epioblasma penita	Е	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 Co	ounty			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Lamar Cour	Lamar County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	Dusky Gopher Frog	Rana sevosa	E/CH	Dec 1 – Mar 31	
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	None				
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	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Alabama Moccasinshell	Medionidus acutissimus	Т	Low flow conditions
	Orange-nacre Mucket	Lampsilis perovalis	Т	Low flow conditions
	Ovate Clubshell	Pleurobema perovatum	E	Low flow conditions
	Southern Combshell	Epioblasma penita	E	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 County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	None			
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	PT	May 15 –Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Leake County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	

Leake County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
Mussels	None				
Plants	None				
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15	
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 - Aug 31
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	Т	Low flow conditions
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – Nov 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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Bayou Darter	Etheostoma rubrum	Т	Year round

Lincoln Cou	Lincoln County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Insects	None				
Mammals	None				
Mussels	None				
Plants	None				
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15	
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Alabama Moccasinshell	Medionidus acutissimus	T/CH	Low flow conditions
	Black Clubshell	Pleurobema curtum	Е	Low flow conditions
Ī	Heavy Pigtoe	Pleurobema taitianum	Е	Low flow conditions
	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
Ī	Orange-nacre Mucket	Lampsilis perovalis	T/CH	Low flow conditions
Ī	Ovate Clubshell	Pleurobema perovatum	E/CH	Low flow conditions
	Southern Clubshell	Pleurobema decisum	E/CH	Low flow conditions
Ī	Southern Combshell	Epioblasma penita	Е	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	ounty			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	Т	Low flow conditions
Plants	None			

Madison County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	None			
Mussels	None			
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	PT	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Marshall Co	Marshall County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Indiana Bat	Myotis sodalis	E	May 15 – Aug 31	
	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	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	Т	May 15 – Aug 31
Mussels	Alabama Moccasinshell	Medionidus acutissimus	T/CH	Low flow conditions
	Black Clubshell	Pleurobema curtum	Е	Low flow conditions
	Heavy Pigtoe	Pleurobema taitianum	E	Low flow conditions
	Inflated Heelsplitter	Potamilus inflatus	Т	Low flow conditions
	Orange-nacre 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	Е	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

Montgomery County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Round Hickorynut	Obovaria subrotunda	PT/PCH	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Neshoba County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31

Neshoba County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	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
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	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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

Panola County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Pearl River 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	E/PT	Apr 1 – Jun 3
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	None			
Mussels	Inflated Heelsplitter	Potamilus inflatus	Т	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 County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15 – Aug 15	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	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	E/PT	Apr 1 – Jun 3	
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15	
	Pearl Darter	Percina aurora	T/PCH	Year round	
Insects	None				
Mammals	None				
Mussels	None				
Plants	Louisiana Quillwort	Isoetes Iouisianensis	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	
	Yellow-blotched Map Turtle	Graptemys flavimaculata	Т	May 15 – Aug 15	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Pike County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	None			
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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

Prentiss County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	Е	May 15 – Jun 30 or Aug 1 – Sep 30
Mammals	Indiana Bat	Myotis sodalis	Е	May 15 – Aug 31
	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – 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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	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	E/PT	Apr 1 – Jun 3	
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	None				
Plants	None				
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15	
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15 – Aug 15	
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Sharkey County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions

Sharkey County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions	
	Pyramid Pigtoe	Pleurobema rubrum	PT	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – 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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
-	Pearl Darter	Percina aurora	PCH	Year round
Insects	None			
Mammals	None			
Mussels	None			
Plants	None			
Reptiles	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15 – Aug 15
-	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Smith Cour	Smith County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3	
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	None				
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	

Stone Cour	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	E/PT	Apr 1 – Jun 3	
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Pearl Darter	Percina aurora	T/PCH	Year round	
Insects	None				
Mammals	None				
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	
	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	

Sunflower County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions
	Pyramid Pigtoe	Pleurobema rubrum	PT	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – 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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31

Tallahatchie County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Mussels	None			
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – Nov 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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Indiana Bat	Myotis sodalis	Е	May 15 – Aug 31
	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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

Tishomingo County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Snail Darter	Percina tanasi	Т	Year round
Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	Е	May 15 – Jun 30 or Aug 1 – Sep
				30
Mammals	Gray Bat	Myotis grisescens	Е	Year round

Tishomingo County					
Category	Species	Scientific Name	Status	Optimal Survey Window	
	Indiana Bat	Myotis sodalis	Е	May 15 – Aug 31	
	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Cumberlandian Combshell	Epioblasma brevidens	E/CH	Low flow conditions	
	Oyster Mussel	Epioblasma capsaeformis	E/CH	Low flow conditions	
	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions	
	Slabside Pearlymussel	Pleuronaia (=Lexingtonia) dolabelloides	E/CH	Low flow conditions	
	Snuffbox	Epioblasma triquetra	E	Low flow conditions	
Plants	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	

Tunica Cou	Tunica County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Pallid Sturgeon	Scaphirhynchus albus	Е	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Fat Pocketbook	Potamilus capax	Е	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – Nov 15	
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30	

Union County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
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

Walthall County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
Insects	None			
Mammals	None			
Mussels	None			
Plants	None			
Reptiles	Gopher Tortoise	Gopherus polyphemus	Т	Mar 15 – Sep 30
	None			
	Ringed Map Turtle	Graptemys oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemys pearlensis	PT	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Warren Cou	Warren County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round	
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions	
	Rabbitsfoot	Quadrula cylindrica cylindrica	T/CH	Low flow conditions	
	Pyramid Pigtoe	Pleurobema rubrum	PT	Low flow conditions	
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – 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	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	E	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	E	Low flow conditions

Washington County				
Category	Species	Scientific Name	Status	Optimal Survey Window
	Rabbitsfoot	Quadrula cylindrica cylindrica	Т	Low flow conditions
	Sheepnose Mussel	Plethobasus cyphus	Т	Low flow conditions
Plants	Pondberry	Lindera melissifolia	Е	Mar 15 – 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	E/PT	Apr 1 – Jun 3
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Gulf Sturgeon	Acipenser oxyrinchus desotoi	T/CH	Mar 1 – Oct 15
	Pearl Darter	Percina aurora	T/PCH	Year round
Insects	None			
Mammals	None			
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
	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	PY	Apr 15 – Sep 30

Webster Co	Webster County				
Category	Species	Scientific Name	Status	Optimal Survey Window	
Amphibians	None				
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31	
Crayfishes	None				
Fishes	None				
Insects	None				
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31	
Mussels	Round Hickorynut	Obovaria subrotunda	PT	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	

Wilkinson (County			
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			

Wilkinson County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Birds	Red-cockaded Woodpecker	Picoides borealis	E/PT	Apr 1 – Jun 3
	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	Pallid Sturgeon	Scaphirhynchus albus	Е	Year round
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Fat Pocketbook	Potamilus capax	Е	Low flow conditions
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PY	Apr 15 – Sep 30

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
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	Price's Potato-bean	Apios priceana	Т	Jun 15 – Oct 31
Reptiles	Ringed Map Turtle	Graptemy oculifera	Т	May 15 – Aug 15
	Pearl River Map Turtle	Graptemy pearlensis	PT	May 15 – Aug 15
	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Yalobusha County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	None			
Plants	None			
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30

Yazoo County				
Category	Species	Scientific Name	Status	Optimal Survey Window
Amphibians	None			
Birds	Wood Stork	Mycteria americana	Т	May 1 – Oct 31
Crayfishes	None			
Fishes	None			
Insects	None			
Mammals	Northern Long-eared Bat	Myotis septentrionalis	Т	May 15 – Aug 31
Mussels	Rabbitsfoot	Quadrula cylindrica cylindrica	E	Low flow conditions
Plants	Pondberry	Lindera melissifolia	E	Mar 15 – Nov 15
Reptiles	Alligator Snapping Turtle	Macrochelys temminckii	PT	Apr 15 – Sep 30