

The Reptiles - Class Reptilia

The Crocodilians, Turtles, Lizards, and Snakes

Species Accounts:

The Crocodilians

Order Crocodylia

General Comments: No special effort was made to document the alligator's presence other than the general observations made along Cane River while at the park or while traveling along Cane River from one park unit to the other. No anecdotal information was derived from any conversations had with park personnel to the effect that alligators have ever been observed in Cane River.

Family Alligatoridae

Vernacular: The Crocodiles/Alligators

Common Name: **American Alligator**

Scientific Name: *Alligator mississippiensis* [Daudin 1803]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: While the **Alligator** is mainly a coastal species, it does move inland along larger waterbodies. There are several records from along the Red and Ouachita/Black River drainages, the closest of which is ~4 mi. (6 km) NE of Magnolia and ~6 mi. (10 km) SE of Oakland Plantation. Their occurrence in Cane River would not be unexpected.

Habitat: Primarily freshwater swamps and marshes, but also in rivers, lakes and smaller bodies of water.

Species Accounts:

The Turtles

Order Chelonia

General Comments: Field techniques for turtles involved day and night searches within aquatic and terrestrial habitats and the methods used included dip netting, night lighting, as well as searching in and along aquatic situations, under natural cover objects, riding the park's frontage roads, and deploying hoop nets in the Cane River at both the Magnolia and Oakland Units.

Turtles occurring on CARI: The following turtles were observed or collected on or immediately adjacent to CARI's property during the survey. An observation is defined to include those turtles collected or seen swimming or basking on logs, snags, or other floating debris. Binoculars or spotting scope was used to identify basking turtles. Species recorded were:

Slider (*Trachemys scripta*)
False Map Turtle (*Graptemys pseudogeographica*)
Razorback Musk Turtle (*Sternotherus carinatus*)
Common Musk Turtle (*Sternotherus odoratus*)
Softshell Turtle (*Apalone* sp.)

Z Family Emydidae

Vernacular: The Box and Water Turtles

Common Name: **Slider**

Scientific Name: *Trachemys scripta* [Schoepff 1792]

Subspecies: The **Red-Eared Slider** (*Trachemys scripta elegans*) [Wied & Neuwied 1838] is recognized by both the CNAH and the ITIS.

Local Distribution: This is undoubtedly the most common Louisiana turtle. In most instances, whenever turtles are seen basking on logs, the odds are that at least one is a **Red-Eared Slider** if not all of them. This was the second most observed species on Oakland and the fourth on Magnolia. The voucher specimen collected at Oakland on March 20 is pictured herein (Figure 24). The locations where CARI **Red-Eared Sliders** were observed on the Oakland unit are presented in Figure 25 and the locations on Magnolia unit in Figure 26.

Habitat: Most aquatic areas (i.e., swamps, pools, ditches, ponds, sloughs, rivers, shallow lakes, etc.) with abundant aquatic vegetation and logs or other floating material that can be used for basking.

Common Name: **False Map Turtle**

Scientific Name: *Graptemys pseudogeographica* [Gray 1831]

Subspecies: The **Mississippi Map Turtle** (*Graptemys pseudogeographica kohnii*) [Baur 1890] is the “false map turtle” recognized by the CNAH and present at CARI. The ITIS does not recognize *kohnii* and lists only the nominal subspecies, (*Graptemys pseudogeographica pseudogeographica*) [Gray 1831], the **False Map Turtle** and invalidates other false map turtle subspecies.

The taxonomy of this species in Louisiana remains in question. The **Mississippi Map Turtle** (i.e., *kohnii*), while herein listed as a subspecies of the **False Map Turtle**, may well be evolving into a new species or has already attained that status. The prominent yellow crescent just behind the eyes easily distinguishes it from the **False Map Turtle**, which has a circular spot. This characteristic (i.e., the postorbital crescent) allows identification at a distance with the aid of binoculars.

Local Distribution: The **Mississippi Map Turtle** has been recorded from several locations in Natchitoches Parish as well as from most of the surrounding parishes. While never actually collected from the park proper it was observed in the Cane River near both sites. At Oakland Plantation it was seen basking on the rivers edge just west of the main house (Figure 27) and also just south of Magnolia Plantation (Figure 28) near the bridge where the La. Hwy 119 crosses Cane River. While it was observed on several occasions at both sites, the **False Map Turtle** (the range of which overlaps the **Mississippi Map Turtle's**) was never observed.

Habitat: This is a species of deeper, slack water areas (e.g., lakes, streams, ponds, impoundments, bayous, etc.), where floating logs and snags are available for sunning themselves.

Z Family Kinosternidae

Vernacular: The Mud/Musk Turtles

Common Name: **Razorback Musk Turtle**

Scientific Name: *Sternotherus carinatus* [Gray 1855]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This species is known from a few locations in Natchitoches Parish and most surrounding parishes. It was observed on only one occasion basking in the Cane River in front of Oakland Plantation on July 11, 2002 (Figure 29).

Habitat: The **Razorback Musk Turtle** prefers aquatic situations with at least some moving water, dammed streams (such as Cane River), and the swamps of the larger river basins.

Common Name: **Common Musk Turtle**

Scientific Name: *Sternotherus odoratus* [Latreille 1801]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: Distributed and common throughout Natchitoches Parish, most of Louisiana, and it was observed on only one occasion at Oakland Plantation on August 7, 2002. That specimen (Figure 30), taken as a voucher specimen, was found on the east edge of La. Hwy 494 at the junction with La. Hwy 119. This location was adjacent to a roadside ditch recently created by the heavy rainfall that day (Figure 31).

Habitat: Quiet shallow waters, i.e., ponds, marshes, streams, drainage ditches, puddles, etc.

Z Family Trionychidae

Vernacular: The Softshells

Common Name: **Softshell**

Scientific Name: *Apalone* sp. [Lesueur 1827]

Subspecies: There are two species/subspecies in NW Louisiana. The **Pallid Spiny Softshell** (*Apalone spinifera pallida*) [Webb 1962] and the **Midland Smooth Softshell** (*Apalone mutica mutica*) [LeSueur 1827], that are both recognized by the CNAH and the ITIS and possibly occur on CARI.

Local Distribution: **Softshells** are fairly common turtles in the area. There are three records for each species in Natchitoches Parish, ~2 to 4 miles (3-6 km) N to NW of Oakland, and they have also been collected from DeSoto, Sabine, Winn, Grant, Rapides, and Red River Parishes. A single softshell turtle was observed from the La. Hwy 119 bridge just south of Magnolia Plantation basking on a log in Cane River (Figure 32). It was too far away to identify the species; however, the **Spiny Softshell** is the most likely candidate in that Dundee and Rossman (1989:208) state that it “is found in a greater variety of habitats than the **Smooth Softshell** (*A. mutica*) and may be abundant in lakes, oxbows, lagoons, and borrow pits, as well as in rivers.”

Habitat: The spiny, like the smooth softshell, is basically a riverine species of the larger bayous and streams, but can also be found in lakes, creeks and larger canals.

Other Turtles of Possible Occurrence: Turtles potentially occurring on CARI, but were not collected or observed as part of this survey are listed in the table below with the probability of their occurrence indicated.

Vernacular/Common Name	Technical/Scientific Name	Occurrence Potential ¹
Alligator Snapping Turtle	<i>Macrochelys temminckii</i>	L
Common Snapping Turtle	<i>Chelydra serpentina</i>	H
Eastern Mud Turtle	<i>Kinosternon subrubrum</i>	H
False Map Turtle	<i>Graptemys pseudogeographica</i>	L
Chicken Turtle	<i>Deirochelys reticularia</i>	VL
Painted Turtle	<i>Chrysemys dorsalis</i>	M
Eastern River Cooter	<i>Pseudemys concinna</i>	M
Eastern Box Turtle	<i>Terrapene carolina</i>	M
Ornate Box Turtle*	<i>Terrapene ornata</i>	VL
Smooth Softshell	<i>Apalone mutica</i>	L
Spiny Softshell	<i>Apalone spinifera</i>	H

¹H = High probability; M = moderate probability; L = low probability;
VL = very low (highly improbable although possible).

*CARI is on the edge or possibly outside of the species known range.

Records for turtles currently known from the adjacent area (i.e., Natchitoches and surrounding Parishes) are discussed below.

Z Family Chelydridae

Vernacular: The Snapping Turtles

Common Name: **Alligator Snapping Turtle**

Scientific Name: *Macrochelys temminckii* [Harlan 1835] is recognized by the CNAH; however, the ITIS recognizes this species as the *Macrolemys temminckii* [Harlan 1835]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: Only one record exists for Natchitoches Parish and this is from ~11 mi. (18 km) NW of Oakland Plantation, however, **Alligator Snapping Turtles** have also been recorded from the adjacent parishes of Bienville, Grant Parish, Sabine, and Rapides.

Habitat: This species prefers deeper aquatic situations with muddy bottoms and abundant vegetation (e.g., lakes, rivers, impoundments, bayous, swamps, etc.).

Common Name: **Snapping Turtle**

Scientific Name: *Chelydra serpentina* [Linnaeus 1758]

Subspecies: The **Common Snapping Turtle** (*Chelydra serpentina serpentina*) [Linnaeus 1758] is recognized by both the CNAH and the ITIS and probably occurs on CARI.

Local Distribution: With the exception of Winn Parish, **common snappers** have been collected from all parishes adjacent to Natchitoches and from several locations within the parish. The nearest locations to CARI is ~7 mi. (11 km) SSE of Magnolia Plantation and ~11 mi. (18 km) NW of Oakland Plantation

Habitat: While basically an aquatic species, **common snappers** are most often seen crossing roads, which in Louisiana usually results in their winding up in someone's soup pot. Within its range it can be found in most any type of aquatic situation (i.e., lakes, rivers, streams, bayous, pools, swamps, marshes, brooks, creeks, etc.), even to the shallowest of roadside ditches.

Z Family Kinosternidae

Vernacular: The Mud/Musk Turtles

Common Name: **Eastern Mud Turtle** - The ITIS common name for this species is the **Common Mud Turtle**

Scientific Name: *Kinosternon subrubrum* [Lacépède 1788]

Subspecies: The **Eastern Mud Turtle** (*Kinosternon subrubrum subrubrum*) [Lacépède 1788] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana and it probably occurs on CARI.

Local Distribution: **Eastern Mud Turtles** are known from numerous locations within Natchitoches Parish and is a common species throughout Louisiana and will surely be recorded from CARI in the future. The nearest location is within ~1 mi. (1.5 km) north of Oakland Plantation.

Habitat: Most shallow water bodies with soft muddy bottoms such as drainage and roadside ditches or the shallows of lakes, ponds, swamps, streams, bayous, sloughs, etc.

Z Family Emydidae

Vernacular: The Box/Water Turtles

Common Name: **False Map Turtle**

Scientific Name: *Graptemys pseudogeographica* [Gray 1831]

Subspecies: See the discussion above under the species account for the **Mississippi Map Turtle** (*Graptemys pseudogeographica kohnii*) [Baur 1890]. If there are two valid subspecies for this species, this is the nominal one, *Graptemys pseudogeographica pseudogeographica*.

Local Distribution: There is but one locality indicated in Dundee and Rossman (1989) for Natchitoches Parish and this appears to have come from the Red River several miles NW of Oakland Plantation. Most localities in the area are for the Red and Sabine Rivers. While there are several records from both Rapides Parish and Sabine Parishes, the only Natchitoches Parish record is from ~10 mi. (16 km) NW of Oakland Plantation. The nearest to Magnolia Plantation is ~14 mi. (23 km) SE in Rapides Parish.

Habitat: It is similar to the **Mississippi map turtle** in preferring large lakes and streams with abundant aquatic vegetation and sites for basking.

Common Name: **Chicken Turtle**

Scientific Name: *Deirochelys reticularia* [Latreille 1801]

Subspecies: The **Western Chicken Turtle** (*Deirochelys reticularia miaria*) [Schwartz 1956] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: **Chicken turtles** are a species not often seen. There are four records from Natchitoches Parish and only one other from adjacent Vernon Parish.

Habitat: Most fresh, shallow, slack-water situations (tends to avoid moving water) of ponds, pools, lakes, swamps, and ditches.

Common Name: **Painted Turtle**

Scientific Name: *Chrysemys dorsalis* [Schneider 1783]

Subspecies: None recognized by the CNAH, however, the ITIS currently recognizes this species/subspecies as the **Western Painted Turtle** (*Chrysemys picta bellii*) [Gray 1831], which occurs in NW Louisiana and possibly on CARI.

Local Distribution: In the area, there are locality records from Grant and Rapides Parishes and two from Natchitoches Parish. The closest in Natchitoches is ~9 mi. (14.5 km) NW of Oakland Plantation.

Habitat: Most shallow, quiet water areas of lakes, ponds, pools, swamps, and bayous.

Common Name: **Eastern River Cooter**

Scientific Name: *Pseudemys concinna* [LeConte 1830]

Subspecies: None currently recognized by the CNAH, however, the ITIS recognizes this species as (*Pseudemys concinna concinna*) [LeConte 1830].

Local Distribution: Few locality records exist for the area. There are a couple in Natchitoches Parish from several miles north of Oakland as well as from Red River, Rapides, and Sabine Parishes.

Habitat: **Cooters** are not a very abundant species in Louisiana and (when present), like the **Red-Eared Slider**, can be found basking on exposed logs in larger streams, bayous, rivers and swamplands.

Common Name: **Eastern Box Turtle**

Scientific Name: *Terrapene carolina* [Linnaeus 1758]

Subspecies: The **Three-Toed Box Turtle** (*Terrapene carolina triunguis*) [Agassiz 1857] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and probably on CARI.

Local Distribution: In the area, there are locality records from Grant and Rapides Parishes and three from Natchitoches Parish. The closest locality record in Natchitoches is ~8 mi. (13 km) NW of Oakland Plantation. There was high expectation that this species would be one actually encountered during CARI's fieldwork, at least on the back portion of Oakland Plantation.

Habitat: This is mainly a terrestrial species of wet to moderately drained woodlands, and occasionally woody areas that may not be so wet.

Common Name: **Ornate Box Turtle**

Scientific Name: *Terrapene ornata* [Agassiz 1854]

Subspecies: The **Ornate Box Turtle** (*Terrapene ornata ornata*) [Agassiz 1854] is recognized by both the CNAH and the ITIS and while an uncommon species of western Louisiana would be the subspecies on CARI if present.

Local Distribution: While no records exist for Natchitoches Parish, this species is included in that **Ornate Box Turtles** have been found ~ 25 mi. (40 km) to the SE and SW of Magnolia in Rapides and Vernon Parishes, respectively.

Habitat: This is a terrestrial species of Nation's prairie region, thus it is found in dry, open, sandy-type environs.

Species Accounts:

The Lizards

Order Lacertilia

General Comments: On several occasions the larger skinks (*Eumeces* sp.) were observed but could not be caught for a positive species identification. In those instances, the skinks were recorded only as an unidentified lined-skink. In other instances, the lined-skink was caught but was determined to be a hybrid based on upper labial scale counts and post labial scale configurations. In those instances, the skinks were recorded as a hybrid and indicated as *Eumeces fasciatus* x *laticeps*.

Lizards Occurring on CARI: The following lizards were observed or collected on or immediately adjacent to CARI's property during the survey. Species recorded were:

Green Anole (*Anolis carolinensis*)

Five-Lined Skink (*Eumeces fasciatus*)

Broadhead Skink (*Eumeces laticeps*)

Ground Skink (*Scincella lateralis*)

Z Family Polychrotidae

Vernacular: The Anoles

Common Name: **Green Anole**

Scientific Name: *Anolis carolinensis* [Voigt 1832]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This is a very common species locally as well as statewide. It was the second most often observed species on Magnolia Plantation and the fourth on Oakland. The voucher specimen collected at Oakland on February 20 is pictured herein (Figure 33). The locations where **Green Anole** specimens were observed on the Oakland unit are presented in Figure 34 and the locations on Magnolia unit in Figure 35.

Habitat: This is an arboreal species of sparse woods and open areas. It was observed on CARI in trees, on fence posts and railing, in shrubs, and on buildings often sunning itself.

Z Family Scincidae

Vernacular: The Skinks

Common Name: **Five-Lined Skink**

Scientific Name: *Eumeces fasciatus* [Linnaeus 1758]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This was the most abundant species of all herpetozoans encountered on both park units (i.e., 31 on Magnolia and 39 on Oakland), not counting those seen but which avoided capture (i.e., 19 on Oakland and 14 on Magnolia) and were recorded only as “**unidentified lined-skinks**” (*Eumeces* sp.). A female **Five-Lined Skink** with her eggs was uncovered at Oakland on July 11, 2002 and is pictured herein (Figure 36). The locations where **Five-Lined Skinks** were observed on the Oakland unit are presented in Figure 37 and those on Magnolia in Figure 38.

As indicated in the lizard introduction, on several occasions the larger **lined skinks** could not be caught for identification and were recorded only as an **unidentified lined-skink** and some that were caught were determined to be a hybrid based on scale counts/configurations and thus were designated as *Eumeces fasciatus x laticeps*. The locations where **unidentified lined-skinks** were observed are illustrated in Figure 39 for Oakland and in Figure 40 for Magnolia. Figures 41 and 42 present the locations of **hybrid lined-skinks** (*Eumeces fasciatus x laticeps*) on Oakland and Magnolia Plantation, respectively.

Habitat: This is an arboreal species that can be found in a variety of habitats, but prefers open wooded or cleared areas in association with scattered cover material and debris (e.g., on, under, and within rotting logs, rock piles, roofing tin, tree stumps, dead tree trunks and under their bark) and often in association with old buildings and structures.

Common Name: Broadhead Skink

Scientific Name: *Eumeces laticeps* [Schneider 1801]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This was the third most observed herpetozoan on Oakland and the fourth on Magnolia. This is one of the “**lined skinks**,” thus their abundance could have been greater on both parks if all “**unidentified lined-skinks**” had been caught and identified. The **Broadhead Skink** collected at Oakland on May 2, 2002 is pictured (Figure 43). The locations where CARI **Broadhead Skink** specimens were observed on the Oakland unit are in Figure 44 and those locations on Magnolia Plantation in Figure 45.

Habitat: The habitat preference of the **Broadhead Skink** closely mirrors that of the **Five-Lined Skink** where the two often co-occur. **Broadhead skinks** probably tend to be more arboreal than **Five-Lined Skinks** and prefer slightly drier environs.

Common Name: **Ground Skink**

Scientific Name: *Scincella lateralis* [Say in James 1823]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This is another common lizard both locally and statewide. It was well represented on Magnolia Plantation by the seven specimens observed, and it is undoubtedly more abundant on Oakland than that indicated by the three specimens seen there. A **Ground Skink** observed at Oakland on January 29, 2003 is pictured herein (Figure 46). The locations where **Ground Skinks** were observed on the Oakland unit is presented in Figure 47 and the locations on Magnolia Plantation in Figure 48.

Habitat: Under debris (e.g., logs, leaves, boards, roofing tin, old lumber, etc.) and rocks (if present) in well-drained sparse woods and in clear areas in association with human habitation and buildings. Occasionally, observed moving through leaf litter.

Other Lizards of Possible Occurrence: Lizards potentially occurring in CARI, but were not collected or observed as part of this survey are listed in the table below with the probability of their occurrence indicated.

Vernacular/Common Name	Technical/Scientific Name	Occurrence Potential ¹
Mediterranean Gecko*	<i>Hemidactylus turcicus</i>	L
Fence Lizard	<i>Sceloporus undulatus</i>	VL
Coal Skink	<i>Eumeces anthracinus</i>	VL
Six-Lined Racerunner	<i>Aspidoscelis sexlineata</i>	VL
Slender Glass Lizard	<i>Ophisaurus attenuatus</i>	VL

¹H = High probability; M = moderate probability; L = low probability;

VL = very low (highly improbable although possible).

*CARI is on the edge or possibly outside of the species known range.

Records for lizards currently known from the adjacent area (i.e., Natchitoches and surrounding Parishes) are discussed below.

Z Family Anguidae

Vernacular: The Glass Lizards

Common Name: **Slender Glass Lizard**

Scientific Name: *Ophisaurus attenuatus* [Cope 1880]

Subspecies: The **Western Slender Glass Lizard** (*Ophisaurus attenuatus attenuatus*) [Cope 1880] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana, and possibly on CARI.

Local Distribution: While no records exist for Natchitoches Parish, this species is included in that **Glass Lizards** have been found in Rapides, Grant, and Vernon Parishes, ~34 mi. (60 km) E of Oakland and ~40 mi. (65 km) to the SE and SW of Magnolia, respectively.

Habitat: Dry, open, sandy, grassy fields and woodlands.

Z Family Gekkonidae

Vernacular: The Geckoes

Common Name: **Mediterranean Gecko**

Scientific Name: *Hemidactylus turcicus* [Linnaeus 1758]

Subspecies: This species is not listed by the CNAH and the ITIS currently recognizes no subspecies.

Local Distribution: The **Mediterranean Gecko** is an exotic species that entered this country from Europe in the early 1940s on freighters docking at Gulf Coast ports. It has spread throughout the coastal region in all states bordering the Gulf of Mexico as well as in Georgia. It has not been recorded outside of southern Louisiana; however, it has extended its distribution as far north as central Oklahoma and northern Mississippi, thus the potential for its future occurrence on CARI is very probable and why it is included herein. The outside walls of most CARI buildings were searched thoroughly at night by flashlight and it can be said with fair certainty that this exotic currently does not occur on the park at this time, although it can be anticipated in the near future.

Habitat: An arboreal and nocturnal lizard usually in close association with human habitation (i.e., most any structure or building).

Z Family Iguanidae

Vernacular: The Iguanas

Common Name: **Fence Lizard**

Scientific Name: *Sceloporus undulatus* [Bosc & Daudin 1801]

Subspecies: None currently recognized by the CNAH, but the ITIS recognizes the **Northern Fence Lizard** (*Sceloporus undulatus hyacinthinus*) [Green 1818] which occurs in NW Louisiana and possibly on CARI.

Local Distribution: Even if the park's habitat were to be substantially improved in the future, it is doubtful this species would ever be found on CARI since it is mainly a species of the pineywoods. It is included here because it has been collected ~5 mi. (8 km) SW of both Oakland Plantation and Magnolia Plantations, as well as in all surrounding parishes.

Habitat: Prefers dry, open, sunny, woodlands (e.g., oak-pine forest) on fallen trees, wood piles, dead tree trunks, fence railings, old structures/buildings, etc.

Z Family Scincidae

Vernacular: The Skinks

Common Name: **Coal Skink**

Scientific Name: *Eumeces anthracinus* [Baird 1854]

Subspecies: The **Southern Coal Skink** (*Eumeces anthracinus pluvialis*) [Cope 1880] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana, and possibly on CARI.

Local Distribution: This species has been recorded from ~7 mi. (11 km) SW of Magnolia Plantation and from a couple of locations in the northern portion of Natchitoches Parish, as well as from all the surrounding ones, except Red River and Bienville Parishes.

Habitat: On and under debris and cover material (e.g., logs, boards, roofing tin, old lumber, etc.) and rocks piles (if present) in open moist woodlands and wooded hillsides.

Z Family Teiidae

Vernacular: The Whiptails & Racerunners

Common Name: **Six-Lined Racerunner**

Scientific Name: *Aspidoscelis sexlineata* [Linnaeus 1766]

Subspecies: CARI is in an area of intergradation between the **Six-Lined Racerunner** (*Aspidoscelis sexlineata sexlineata*) [Linnaeus 1766] and the **Prairie Racerunner** (*Aspidoscelis sexlineata viridis*) [Lowe 1966], which are recognized by both the CNAH and the ITIS. It would have a low probability of occurrence on CARI.

Local Distribution: Red River Parish is the only parish in the local area lacking locality records for this species. It has been recorded ~2 mi. (3 km) W and N of Magnolia Plantation and ~5 mi. (8 km) SE of Oakland Plantation.

Habitat: Dry, open, sunny, environs with sandy, friable, soils bordering woodlands are the preferred habitat.

Species Accounts:

The Snakes

Order Squamata/Suborder Serpentes

General Comments: Field techniques for surveying the snakes involved visual encounter surveys in both aquatic and terrestrial habitats during the daylight hours and night lighting after dark. Visual encounters during the day was mainly by turning natural cover objects (e.g., tin, logs, rock, etc.) and checking under researcher-placed cover boards, while at night by riding the park's frontage roads and spot lighting along aquatic sites.

Snakes occurring on CARI: The following snakes were observed or collected on or immediately adjacent to CARI's property during the survey.

Eastern Racer (*Coluber constrictor*)

Western Rat Snake (*Pantherophis obsoletus*)

Ribbon Snake (*Thamnophis proximus*)

Copperhead (*Agkistrodon contortrix*)

Z Family Colubridae

Vernacular: Harmless Egg-Laying Snakes

Common Name: **Eastern Racer**

Scientific Name: *Coluber constrictor* [Linnaeus 1758]

Subspecies: The **Buttermilk Racer** (*Coluber constrictor anthicus*) [Cope 1862] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana, and on CARI.

Local Distribution: The location where the **Buttermilk Racer** was observed on the Oakland unit is presented in Figure 49. The specimen found was the anterior half of a young (i.e., small) specimen that apparently had been run over by a lawnmower, severely mangled, and was in an advance state of decay, thus not collected and no voucher specimen exists.

Habitat: This is a species of open woodlands and fields and those environs associated thickets, bordering undergrowth, natural clearings, and occasionally in urban areas (e.g., unmowed grassy situations and lawns).

Common Name: **Western Rat Snake**

Scientific Name: *Pantherophis obsoletus* [Say 1823]

Subspecies: None recognized by the CNAH; however, the ITIS currently recognizes the local rat snake population as the **Texas Rat Snake** (*Elaphe obsoleta lindheimerii*) [Baird & Girard 1853].

The **New World Rat Snakes** (genus *Elaphe*) was recently reassigned to the revalidated genus *Pantherophis* (Utiger et al. 2002) on the basis mtDNA analysis that indicates the **North American Rat Snakes** (i.e., *guttatus*, *bairdi*, *obsoletus*, and *vulpinus*) are monophyletic lineage different for the Old World members of *Elaphe*.

Local Distribution: The **Western Rat Snake** is one of the more commonly encountered serpents throughout Louisiana. It is known from numerous locations in Natchitoches Parish and has been recorded from all the surrounding parishes. It was the most often encountered snake in this survey. The voucher specimen collected at Oakland on April 17, 2002 is pictured herein (Figure 50). The locations where CARI's western rat snakes were observed on the Oakland unit are presented in Figure 51 and the locations for Magnolia Plantation in Figure 52.

Habitat: Highly variable: upland forests, bottomland hardwoods and their edge community, river swamps, thickets, farmlands, agricultural fields, and often in urban areas where it arboreal ability takes it high up into trees and into purple martin houses in search of their eggs and young.

Z Family Natricidae

Vernacular: Harmless Live-Bearing Snakes

Common Name: **Ribbon Snake**

Scientific Name: *Thamnophis proximus* [Say 1823]

Subspecies: The **Western Ribbon Snake** (*Thamnophis proximus proximus*) [Say 1823] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and on CARI.

Local Distribution: This species is widely distributed throughout Louisiana. It is represented by the more coastal subspecies, the **Gulf Coast Ribbon Snake** (*Thamnophis proximus orarius*) and the northern subspecies, the **Western Ribbon Snake**, which occurs on CARI. The western ribbon snake was observed (and collected) but once on both the Oakland and Magnolia Plantations. The voucher specimen collected at Oakland on April 17, 2002 is pictured herein

(Figure 53) and its site of collection is presented in Figure 54. The location where the Magnolia Plantation specimen was collected is indicated in Figure 55.

Habitat: The **Ribbon Snake** is a semi-aquatic species found in association with lakes, ponds, bayous, streams, swamps and marshes, etc. However, it can be also be found well removed from wet situations as was the Oakland voucher specimen which was caught entering a burrow under one of the large live oak trees lining the entrance path to the main house.

Z Family Viperidae

Vernacular: The Pitvipers

Common Name: **Copperhead**

Scientific Name: *Agkistrodon contortrix* [Linnaeus 1766]

Subspecies: The **Southern Copperhead** (*Agkistrodon contortrix contortrix*) [Linnaeus 1766] is recognized by both the CNAH and the ITIS and it occurs in NW Louisiana and on CARI.

Local Distribution: The **Southern Copperhead** is a fairly common species throughout Louisiana and has been recorded from Natchitoches Parish on numerous occasions as well as all surrounding parishes. The locations where CARI **Copperheads** were observed on the Oakland unit are presented in Figure 56, however, there is no voucher specimen in that these are reliable historic observations reported by Ron Bolton, a grounds maintenance employee. None were encountered on Magnolia Plantation. At Oakland Plantation, one was curled up at the base of an old dead tree along the frontage highway and another under the steps at the overseer's house.

Habitat: **Copperheads** are found primarily in woodlands that can range from dry uplands to low fairly wet environs.

Other Snakes of Possible Occurrence: Snakes potentially occurring in CARI, but were not collected or observed as part of this survey are listed in the table below with the probability of their occurrence indicated.

Vernacular/Common Name	Technical/Scientific Name	Occurrence Potential ¹
Southern Water Snake	<i>Nerodia fasciata</i>	M
Plainbelly Water Snake	<i>Nerodia erythrogaster</i>	H
Diamondback Water Snake	<i>Nerodia rhombifera</i>	H
Mississippi Green Water Snake	<i>Nerodia cyclopion</i>	M
Glossy Crayfish Snake *	<i>Regina rigida</i>	L
Graham's Crayfish Snake	<i>Regina grahamii</i>	L
Common Garter Snake*	<i>Thamnophis sirtalis</i>	VL
Brown Snake	<i>Storeria dekayi</i>	M
Redbelly Snake	<i>Storeria occipitomaculata</i>	L
Rough Earth Snake	<i>Virginia striatula</i>	M

Smooth Earth Snake*	<i>Virginia valeriae</i>	VL
Ringneck Snake	<i>Diadophis punctatus</i>	VL
Eastern Hognose Snake	<i>Heterodon platirhinos</i>	M
Scarlet Snake	<i>Cemophora coccinea</i>	VL
Rough Green Snake	<i>Opheodrys aestivus</i>	M
Mud Snake	<i>Farancia abacura</i>	M
Coachwhip	<i>Masticophis flagellum</i>	L
Louisiana Pine Snake	<i>Pituophis ruthveni</i>	VL
Slowinski's Cornsnake	<i>Pantherophis slowinskii</i>	M
Milk Snake	<i>Lampropeltis triangulum</i>	L
Prairie Kingsnake	<i>Lampropeltis calligaster</i>	L
Common Kingsnake	<i>Lampropeltis getula</i>	H
Flathead Snake*	<i>Tantilla gracilis</i>	VL
Cottonmouth	<i>Agkistrodon piscivorus</i>	H
Texas Coral Snake	<i>Micrurus tener</i>	L
Pygmy Rattlesnake	<i>Sistrurus miliarius</i>	L
Timber Rattlesnake	<i>Crotalus horridus</i>	VL

¹H = High probability; M = moderate probability; L = low probability;

VL = very low (highly improbable although possible).

*CARI is on the edge or possibly outside of the species known range.

Records for snakes currently known from the adjacent area (i.e., Natchitoches and surrounding Parishes) are discussed below.

Z Family Colubridae

Vernacular: Harmless Egg-Laying Snakes

Common Name: **Scarlet Snake**

Scientific Name: *Cemophora coccinea* [Blumenbach 1788]

Subspecies: The **Northern Scarlet Snake** (*Cemophora coccinea copei*) [Jan 1663] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana, and remotely possible on CARI.

Local Distribution: This species occurrence is areawide in northwest Louisiana in that only Red River and DeSoto Parishes lack locality records of those parishes bordering on Natchitoches. In addition it has been recorded from several locations within Natchitoches Parish, the closest of which is ~7 mi. (11 km) NW of Oakland Plantation and ~9 mi. (14.5 km) S of Magnolia Plantation.

Habitat: Prefers sandy, friable, damp soils for burrowing under debris (e.g., logs, shingles, boards, roofing tin, old lumber, bark, etc.) and rocks and stones (if present). Also found under tree bark and in rotting logs, tree trunks, and stumps.

Common Name: **Slowinski's Cornsnake**

Scientific Name: *Pantherophis slowinskii* [Burbrink 2002]

Subspecies: This is a newly described species i.e., *Elaphe slowinskii* by Burbrink (2002) that has yet to be included in either the CNAH or the ITIS listings, thus no subspecies are recognized. Burbrink (2002) reassigned the formerly **Great Plains Rat Snake** (*Elaphe guttata emoryi*) to *slowinskii*. See the **Western Rat Snake** discussion above concerning the suppression of the genus *Elaphe* for the **New World Rat Snakes** and revalidation to the genus *Pantherophis* for those species (Utiger 2002).

Local Distribution: Burbrink (2002) indicates **Slowinski's Cornsnake** is found throughout the pine/oak upland habitat of western and northwestern Louisiana and eastern Texas. This distribution includes all the specimens formerly considered the **Great Plains Rat Snake** (*Elaphe guttata emoryi*, now *Pantherophis guttatus*). Thus, the four locality records in Dundee and Rossman (1989) of *E. g. emoryi* for southeast Natchitoches Parish, and all those from surrounding parishes supposedly can now be considered **Slowinski's Cornsnake**. The type locality for the species is the "longleaf pine highway, 0.5 miles west of Hwy 119, Natchitoches Parish, Louisiana" (Burbrink 2002).

Habitat: Mainly pine/oak upland woodlands and forests, but also can be found in fields, thickets, and old barns.

Common Name: **Prairie Kingsnake**

Scientific Name: *Lampropeltis calligaster* [Harlan 1827]

Subspecies: The **Prairie Kingsnake** (*Lampropeltis calligaster calligaster*) [Harlan 1827] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: Specimens exist for all area parishes except Winn and Grant Parishes. One specimen is from ~10 mi. (16 km) SW and another ~10 mi. (16 km) NW of Oakland Plantation. A third specimen is ~10 mi. (16 km) S of Magnolia Plantation

Habitat: This is a species of open habitat (e.g., prairie, farmland, pasture, grassy fields, etc.), but is also found on occasion in mixed pine-hardwoods or bottomland hardwoods.

Common Name: **Common Kingsnake**

Scientific Name: *Lampropeltis getula* [Linnaeus 1766]

Subspecies: The **Speckled Kingsnake** (*Lampropeltis getula holbrooki*) [Stejneger 1902] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and almost assuredly on CARI.

Local Distribution: This **Kingsnake** occurs statewide and there are several locality records for Natchitoches Parish, one of which is ~8mi. (13 km) SW of Oakland Plantation and ~10 mi. (13 km) W of Magnolia Plantation.

Habitat: The **Speckled Kingsnake** occupies a variety of moist environs ranging from the not-so-wet uplands to damp bottomland hardwoods, but especially in open woodlands and their edge community, uncultivated cropland, grassy overgrown fields, etc. It is often found in association with human habitation, especially in and around buildings that might harbor rodents.

Common Name: **Milk Snake**

Scientific Name: *Lampropeltis triangulum* [Lacépède 1789]

Subspecies: The **Louisiana Milk Snake** (*Lampropeltis triangulum amaura*) [Cope 1861] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: This is the local version of the coral snake mimic. There are a couple of localities in Natchitoches Parish, one of which is ~5 mi. (8 km) NW of Oakland Plantation. Another specimen from Grant Parish was collected just across the Red River from Magnolia Plantation (i.e., ~10 mi. (16 km) ENE of Magnolia).

Habitat: **Milksnakes** are secretive and remain hidden for the most part under debris or cover material (e.g., rotting logs, leaves, shingles, boards, roofing tin, old lumber, etc.) and rocks and stones (if present) in moist situations. In the author's experience, the milk snake was often discovered in standing dead tree trunks and stumps after stripping off the bark.

Common Name: **Coachwhip**

Scientific Name: *Masticophis flagellum* [Shaw 1802]

Subspecies: The **Eastern Coachwhip** (*Masticophis flagellum flagellum*) [Shaw 1802] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: This species is confined to the more northern portion of the state. Several records exist for Natchitoches Parish with the closest ~4 mi. (6.5 km) SW of Magnolia Plantation and ~8 mi. (13 km) WNW of Oakland Plantation.

Habitat: Habitat variable, ranging from dry, sandy, open woods and agricultural settings (e.g., farmlands and pastures) to abandoned fields, grasslands, and woodland margins.

Common Name: **Rough Green Snake**

Scientific Name: *Opheodrys aestivus* [Linnaeus 1766]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This is a very slender arboreal snake of likely occurrence on CARI, that is seldom seen and difficult to locate in vegetation. It is known from four localities in Natchitoches Parish, the closest to Oakland Plantation ~ 9 mi. (14.5 km) to the NW and ~10 mi. (16 km) to the SSW of Magnolia Plantation

Habitat: Arboreal in shrubs, low trees, vines, thickets, green briar, etc. in dry, sparse, open woodlands and in vegetation overhanging aquatic environs.

Common Name: **Louisiana Pine Snake**

Scientific Name: *Pituophis ruthveni* [Stull 1929]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: The **Louisiana Pine Snake** is a close cousin of the more western **Bull Snake** and it inhabits the piney woods of north central Louisiana and eastern Texas. It may be the rarest serpent in Louisiana and is an U.S. Fish and Wildlife Service, Candidate Taxon, Ready for Proposal as a T&E species. There are five Natchitoches Parish records, one ~ 9 mi. (14.5 km) NW of Oakland Plantation and another ~ 6 mi. (10 km) SW of Magnolia Plantation. The chance of this species ever occurring on CARI is extremely rare and it is included here only because of its close proximity in the piney woods to the west of the park.

Habitat: The dry, well-drained sandy soils of Louisiana's western longleaf piney woods.

Common Name: **Flathead Snake**

Scientific Name: *Tantilla gracilis* [Baird & Girard 1853]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: The **Flathead Snake** is a diminutive species found in northwestern Louisiana, but not likely on CARI. In Natchitoches Parish this species is known from several specimens and mainly to the west of CARI (the nearest is ~8 mi. (13 km) SW of Magnolia Plantation) on the steep slopes and rock outcrops of Kisatchie National Forest's piney woods, i.e., Kisatchie Hills Wilderness Area's (a.k.a. Red Dirt National Refuge/Longleaf Vista Recreation Area).

Habitat: Under debris or cover material on well drained hillsides (e.g., rocks, stones, rotting logs, boards, roofing tin, old lumber, etc.).

Z Family Elapidae

Vernacular: Coral Snakes

Common Name: **Texas Coral Snake**

Scientific Name: *Micrurus tener* [Baird & Girard 1853]

Subspecies: None currently recognized by the CNAH, however, the ITIS recognizes the local **Coral Snake** population as (*Micrurus fulvius tener*) [Baird & Girard 1853].

Local Distribution: The **Coral Snake** is the only Louisiana poisonous snake that is highly neurotoxic. It is known from several localities in Natchitoches Parish and from all the surrounding parishes except Red River and DeSoto Parishes.

Habitat: Dry to moist sandy soil situations under debris or cover material (e.g., rotting logs, leaves, shingles, boards, roofing tin, old lumber, bark, etc.), rocks and stones (if present), and in burrows.

Z Family Natricidae

Vernacular: Harmless Live-Bearing Snakes

Common Name: **Mississippi Green Water Snake**

Scientific Name: *Nerodia cyclopion* [Dum9ril, Bibron & Dum9ril 1854]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This species is more prevalent in the southern half of Louisiana, but can be found statewide. There are 5 records for Natchitoches Parish with the closest about midway between the Magnolia and Oakland Plantations.

Habitat: This is a fairly common water snake, and like the **Diamondback Water Snake**, can be found in most quiet, slack-water situations (e.g., streams, lakes, bayous, canals, sloughs, ponds, roadside ditches, river swamps, rice fields, marshes, etc.).

Common Name: **Plainbelly Water Snake**

Scientific Name: *Nerodia erythrogaster* [Forster 1771]

Subspecies: The **Yellowbelly Water Snake** (*Nerodia erythrogaster flavigaster*) [Conant 1949] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and almost assuredly on CARI.

Local Distribution: The species occurs statewide; there are 4 locality records for Natchitoches Parish, one of which is ~9 mi. (14.5 km) NW of Oakland Plantation and another ~13 mi. (21 km) SW of Magnolia Plantation. However, on July 25, 2002 the author observed a specimen found dead on La. Hwy. 494, ~2.5 miles SW of Oakland Plantation.

Habitat: This is a common species found in most permanent aquatic environs throughout its range (e.g., streams, lakes, bayous, canals, ponds, roadside ditches, river swamps, rice fields, marshes, etc.)

Common Name: **Southern Water Snake**

Scientific Name: *Nerodia fasciata* [Linnaeus 1766]

Subspecies: The **Broad-Banded Water Snake** (*Nerodia fasciata confluens*) [Blanchard 1923] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and probably on CARI.

Local Distribution: This species can be found most anywhere in Louisiana. It is known from several localities in Natchitoches Parish of which the nearest is ~5 mi. (8 km) NW of Oakland Plantation and another ~5 mi. (8 km) ESE of Magnolia Plantation. There is a good chance the **Broad-Banded Water Snake** will eventually be discovered on CARI.

Habitat: This is a very common denizen of most shallow water environs throughout its range (e.g., streams, lakes, ponds, river swamps, marshes, wet meadows, etc.)

Common Name: **Diamondback Water Snake**

Scientific Name: *Nerodia rhombifera* [Hallowell 1852]

Subspecies: The **Diamondback Water Snake** (*Nerodia rhombifera rhombifera*) [Hallowell 1852] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and probably on CARI.

Local Distribution: This species is found throughout the state, all parishes surrounding Natchitoches, and there are several locality records within Natchitoches Parish with the closest ~5 mi. (8 km) NW of Oakland Plantation. The author is confident it will eventually turn up on CARI.

Habitat: This is a very common species found in most quiet, shallow, slack-water situations of streams, lakes, bayous, canals, sloughs, ponds, roadside ditches, river swamps, rice fields, marshes, etc.

Common Name: **Graham's Crayfish Snake**

Scientific Name: *Regina grahamii* [Baird & Girard 1853]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: **Graham's Crayfish Snake**, an uncommon and secretive water snake, can be found throughout most of the state. Locally, there have been a few specimens recorded for Natchitoches Parish, and only one for an adjacent parish, (i.e., Rapides Parish). One of the Natchitoches Parish specimens was collected approximately equidistant between Oakland Plantation and Magnolia Plantation.

Habitat: Most often found hidden in debris along the edge of streams, lakes, sloughs, ponds, drainage ditches, swamps, etc. and is suspected of probing crawfish burrows for its more favored prey.

Common Name: **Glossy Crayfish Snake**

Scientific Name: *Regina rigida* [Say 1825]

Subspecies: The **Gulf Crayfish Snake** (*Regina rigida sinicola*) [Huheey 1959] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana, and possibly on CARI.

Local Distribution: This species, like the **Green Water Snake**, tends to be a more coastal watersnake in Louisiana, but it still can be found most anywhere in the state. There are 5 records for Natchitoches Parish with the closest about midway between Magnolia and Oakland Plantations. Locally, it has also been recorded from Sabine, Grant, and Rapides Parishes.

Habitat: This is a not so common species that exhibits a high fidelity to water. It is often found burrowed in the mud of quiet, shallow, slack-water situations along streams, lakes, sloughs, ponds, drainage ditches, and swamps.

Common Name: **Brown Snake**

Scientific Name: *Storeria dekayi* [Holbrook 1836]

Subspecies: The **Midland Brown Snake** (*Storeria dekayi wrightorum*) [Trapido 1944] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and probably on CARI.

Local Distribution: This species can be found throughout most all of Louisiana and is well represented in Natchitoches Parish. One of those specimens was taken ~5 mi. (8 km) SSW of Oakland Plantation and another ~ 3 mi. (5 km) SW of Magnolia Plantation.

Habitat: This is a very secretive snake adaptable to a wide variety of moist habitat types; usually found under some type of debris or cover material (e.g., logs, leaves, boards, roofing tin, old lumber, etc.)

Common Name: **Redbelly Snake**

Scientific Name: *Storeria occipitomaculata* [Storer 1839]

Subspecies: The **Florida Redbelly Snake** (*Storeria occipitomaculata obscura*) [Trapido 1944] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: This close cousin to the **Brown Snake** is represented by several specimens in Natchitoches Parish, the closest of which is ~10 mi. (16 km) NW of Oakland Plantation and ~8 mi. (13 km) S of Magnolia Plantation.

Habitat: Like the **Brown Snake**, it is very secretive and can be found in varying habitats, but under cover of some kind (e.g., logs, leaves, boards, roofing tin, old lumber, etc.) in or near wooded areas. “Probably more specimens have been taken on blacktop roads on warm summer nights than in any other situation” (Dundee and Rossman 1989).

Common Name: **Common Garter Snake**

Scientific Name: *Thamnophis sirtalis* [Linnaeus 1758]

Subspecies: The **Eastern Garter Snake** (*Thamnophis sirtalis sirtalis*) [Linnaeus 1758] is recognized by the CNAH; however, the ITIS refers to this subspecies as the **Common Garter Snake** rather than the Eastern. This is the subspecies that occurs in NW Louisiana and possibly on CARI.

Local Distribution: There are no records for the **Eastern Garter Snake** in most of north central Louisiana including Natchitoches Parish. While it is highly unlikely there are **Garter Snakes** on CARI, it is included herein because of records just to the east in Grant, Rapides, and Winn Parishes. The nearest locality is in the NE corner of Grant Parish, ~30 mi. (48.5 km) ENE of Magnolia Plantation.

Habitat: Prefers moist, shallow, open, grassy aquatic situations (e.g., marsh, wet meadows, and margins of lakes, ponds, streams, bayous, and sloughs) in and near to woods.

Common Name: **Rough Earth Snake**

Scientific Name: *Virginia striatula* [Linnaeus 1766]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: This species occurs throughout most of the state and is known from several specimens in Natchitoches Parish. The closest is ~7 mi. (11 km) SW of Magnolia Plantation and ~13 mi. (21 km) SW of Oakland Plantation. With time this species is expected to be uncovered on CARI.

Habitat: A normally secretive, somewhat subterranean but fairly common snake found in a variety of habitats, usually under debris (e.g., logs, leaves, boards, bark, roofing tin, old lumber, etc.) and rocks (if present). It is probably most often uncovered while in close association with human habitation, especially during cultivation of flower and vegetable gardens.

Common Name: **Smooth Earth Snake**

Scientific Name: *Virginia valeriae* [Baird & Girard 1853]

Subspecies: The **Eastern Smooth Earth Snake** (*Virginia valeriae valeriae*) [Baird & Girard 1853] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: This is a rarely found species restricted to northwest Louisiana and the Florida parishes within the state. While there are no records for Natchitoches Parish, the **Smooth Earth Snake** has been recorded to the east in Grant, Rapides, and Winn Parishes, as well as to the west in Sabine Parish. The nearest locality is ~27 mi. (43 km) NE of Oakland Plantation in Winn Parish. Its occurrence on CARI is considered very low.

Habitat: Under debris (e.g., logs, leaves, boards, roofing tin, old lumber, etc.) and rocks (if present) in and near drier hardwood forests.

Z Family Viperidae

Vernacular: The Pitvipers

Common Name: **Cottonmouth**

Scientific Name: *Agkistrodon piscivorus* [Lacépède 1789]

Subspecies: The **Western Cottonmouth** (*Agkistrodon piscivorus leucostoma*) [Troost 1836] is recognized by both the CNAH and the ITIS, occurs in NW Louisiana and most probably on CARI.

Local Distribution: The infamous **Cottonmouth** occurs statewide and is probably the most often encountered poisonous snake in Louisiana. It has been recorded from several locations in Natchitoches Parish and in all the adjoining parishes. The nearest records to CARI was within ~5 mi. (8 km) of both Oakland Plantation to the south and Magnolia Plantation to the east. It is probably just a matter of time before the **Cottonmouth** is actually found within the park's boundary on both Oakland and Magnolia units.

Habitat: Borders of most aquatic situations (e.g., along streams, ponds, lakes, swamps, bayous, borrow pits, ricefields, drainage ditches, canals, etc.).

Common Name: **Pygmy Rattlesnake**

Scientific Name: *Sistrurus miliarius* [Linnaeus 1766]

Subspecies: The **Western Pygmy Rattlesnake** (*Sistrurus miliarius streckeri*) [Gloyd 1935] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: **Pygmy Rattlers** occur throughout the state, except for the Mississippi River's alluvial floodplain north of the Baton Rouge area. It is known from several localities in Natchitoches Parish and from all the surrounding parishes except Red River and DeSoto Parishes. It has been recorded within ~5 mi. (8 km) S of Oakland Plantation and ~2 mi. (3 km) SSW of Magnolia Plantation.

Habitat: Usually in association with nearby aquatic sites (e.g., along rivers, streams, ponds, lakes, swamps, marshes, bayous, canals, etc. or on their floodplains).

Common Name: **Timber Rattlesnake** (a.k.a. the **Canebrake Rattler**)

Scientific Name: *Crotalus horridus* [Linnaeus 1758]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: The **Timber Rattler** occurs in the eastern and northern portion of Louisiana. It is known from a few specimens from the northern part of the parish (i.e., the nearest ~20 mi. (32 km) NE of Oakland Plantation) and from all surrounding parishes except DeSoto, Rapides, and Sabine Parishes.

Habitat: Extensive moist wooded areas (e.g., mixed woodlands and bottomland hardwood) but also cane fields as well as dry hilly situations.

Z Family Xenodontidae

Vernacular: The Harmless Rear-Fanged Snakes

Common Name: **Ringneck Snake**

Scientific Name: *Diadophis punctatus* [Linnaeus 1766]

Subspecies: The **Mississippi Ringneck Snake** (*Diadophis punctatus stictogenys*) [Cope 1860] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and possibly on CARI.

Local Distribution: Two records exist for Natchitoches Parish, one of which is ~11 mi. (18 km) NW of Oakland Plantation. Other records for the area are in Winn, Grant, and Rapides Parishes.

Habitat: This is a secretive snake (not necessarily uncommon but seldom encountered) of shady woodlands and woodland borders usually found in or under rotting logs and stumps or under

cover material (e.g., boards, roofing tin, shingles, old lumber, bark, etc.) and rocks and stones (if present).

Common Name: **Mud Snake**

Scientific Name: *Farancia abacura* [Holbrook 1836]

Subspecies: The **Western Mud Snake** (*Farancia abacura reinwardtii*) [Schlegel 1837] is recognized by both the CNAH and the ITIS and occurs in NW Louisiana and probably on CARI.

Local Distribution: Three records exist for Natchitoches Parish, one of which is from ~4 mi. (6.5 km) W of Oakland Plantation and another ~13 mi. (21 km) WNW of Magnolia Plantation. Of the surrounding parishes, Winn is the only one for which a record is lacking.

Habitat: This is an aquatic, burrowing, reclusive species of the swamp/marsh habitat associated with riverine floodplains, bottomland hardwoods, and cypress-tupelogum swamps. Its diet consists almost solely of the eel-like salamanders, the **Amphiumas** and **Sirens**.

Common Name: **Eastern Hognose Snake**

Scientific Name: *Heterodon platirhinos* [Latreille 1801]

Subspecies: None currently recognized by either the CNAH or the ITIS.

Local Distribution: The **Hognose** is a common species of statewide occurrence that mimics the cobra by flattening its head and hisses when encountered, which however is all show in that it is harmless. There are 3 locality records for Natchitoches Parish, one of which is ~5 mi. (8 km) SW of Oakland Plantation and ~7 mi. (11 km) W of Magnolia Plantation. With time this species can be expected to make an appearance on CARI.

Habitat: Habitat fairly variable but seems to prefer dry, open situations (e.g., pastures, abandoned fields, old orchards, woods edge, etc.), where it can find its favored prey (i.e., toads).

Acknowledgements

The author would like to thank Ms. Laura Gates, Superintendent of Cane River Creole National Historical Park, for allowing this survey on her Park, for taking time from her busy schedule to provide an initial guided tour of the park, for the helpful discussions and Park background information provided over the course of the investigation, and for allowing her staff to assist with the field work. Those staff members that willingly, graciously, and eagerly provided assistance included Mr. Eric Ford, Mr. Ron Bolton, Mr. Greg Duggan, Mr. Ken Vancalsem, and

Mr. Randy Smith. Their assistance was most valuable and a hearty thanks of appreciation goes out to each of them.

Those acknowledged for their assistance in editing this report are Mr. Larry West (Region 4 Inventory & Monitoring Program Coordinator), Messrs. David Muth and Bill Hulslander (Natural Resource Specialists at Jean Lafitte National Historic Park and Preserve), Dr. Edmund D. Keiser (Ecological Consulting, Oxford, MS) and Dr. Robert A. Thomas (Loyola University, New Orleans, LA).

References

- Behler, John L. and F. Wayne King. 1979. National Audubon Society's Field Guide to Reptiles and Amphibians. Alfred A. Knopf. New York, NY. 743 pp.
- Burbrink, Frank T., R. Lawson, and J. B. Slowinski. 2000. Mitochondrial DNA phylogeography of the North American rat snake (*Elaphe obsoleta*): a critique of the subspecies concept. *Evolution* 54: 2107-2114.
- Burbrink, Frank T. 2001. Systematics of the eastern ratsnake complex (*Elaphe obsoleta*). *Herpetol. Monographs*. 15: 2001: 1-53.
- Center for North American Herpetology (CNAH, <http://www.naherpetology.org>)
- Cochran, Doris M. and Coleman J. Goin. 1970. The new field book of reptiles and amphibians. G. P. Putnam's Sons, New York, NY. 359 pp.
- Conant, Roger and Joseph T. Collins. 1998. A field guide to reptiles & amphibians. Eastern and Central North America. Third Edition Expanded. Houghton Mifflin Co., Boston and New York. 616 pp.
- Dundee, Harold a. and Douglas A. Rossman. 1989. The amphibians and reptiles of Louisiana. Louisiana State University Press, Baton Rouge and London. 300 pp.
- Ernst, Carol H., Roger W. Barbour, and Jeffrey E. Lovich. 1994. Turtles of the United States and Canada. Smithsonian Institution Press, Washington and London. 578 p.
- Integrated Taxonomic Information System (ITIS, <http://www.itis.usda.gov>)
- Keiser, Edmund D. and Larry D. Wilson. 1969. Checklist and key to the herpetofauna of Louisiana. Lafayette Natural History Museum Technical Bulletin 1, Lafayette, La. 51 pp.
- Masta, S.E., B.K. Sullivan, T. Lamb, and E. J. Routman. 2002. Molecular systematics, hybridization, and phylogeography of the *Bufo americanus* complex in Eastern North America. *Molecular Phylogenetics and Evolution* 24(2):302-314.
- Powell, Robert, Joseph T. Collins, and Errol D. Hooper, Jr. 1998. A key to amphibians and

- reptiles of the continental United States and Canada. University of Kansas Press, Lawrence. 131 pp.
- Petranka, James W. 1998. Salamanders of the United States and Canada. Smithsonian Inst. Press, Washington and London. 587 pp.
- National Climatic Data Center. 2003. State Monthly Temperature, Precipitation, and Degree Days 1971-2000 (and previous normal periods). Historical Climatology Series No. 4 and 5.
- Utiger, Urs, Notker Helfenberger, Beat Schatti, Catherine Schmidt, Markus Ruf, and Vincent Ziswiler. 2002. Molecular systematics and phylogeny of Old and New World ratsnakes, *Elaphe* auct., and related genera (Reptilia, Squamata, Colubridae). Russian Journal of Herpetology 9(2):105-124.
- U.S. Department of Agriculture. 1990. Soil survey of Natchitoches Parish, Louisiana. USDA, Soil Conservation Service. 193 pp + maps.
- U.S. Fish & Wildlife Service. 2003a. <http://ecos.fws.gov/tess/frdocs/1985/85-14827.pdf>. March 7, 2003.
- U.S. Fish & Wildlife Service. 2003b. <http://ecos.fws.gov/tess/candforms.pdf/r4/pitrut.pdf>. April 7, 2003.