

# MAMMALS



Raccoon Procyon lotor

#### INTRODUCTION

lthough geographic distributions of Alabama's 64 species of native mammals are reasonably well known, there generally is a paucity of knowledge relative to genetics, physiology, parasites, pathogens, dynamics of populations, diet, reproduction, and other basic aspects of their biology. Small size, nocturnal activity, and secretive natures of most mammals make them difficult to study. A variety of trapping and monitoring techniques has allowed acquisition of information on distribution and habitat of most species, but significant effort often results in few captures or observations. For example, mist nets to capture bats and rodents traps used for small mammals often yield no captures, even when placed into what appear to be favorable habitats for several consecutive nights.

Ignorance and fear have led to needless destruction of populations of certain mammals, especially large carnivores and bats. Fortunately, educational efforts by public schools, conservation organizations, television programs, availability of information on the Internet, and other efforts are increasing public awareness of the need to protect all of our native flora and fauna.

Many habitats that were occupied by mammals in Alabama have been cleared and cultivated, degraded by erosion, harvested for timber, converted to shopping centers and housing developments, and otherwise made less desirable or unsuitable for native species. Although significant efforts are being made to restore some areas to native wildlife habitat, this will take decades to accomplish, and more species may be lost in the interim.

Scientific classification, common names, and order in which species are presented in the checklist follow Vaughan et al. (2000) and Wilson and Reeder (1993). All taxa, including exotics known to breed in the state, and those extirpated in historic times, have been included on the checklist.

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# MAMMALS CLASS MAMMALIA

# **NEW WORLD OPOSSUMS** ORDER DIDELPHIMORPHIA

#### OPOSSUMS - FAMILY DIDELPHIDAE

Virginia Opossum Didelphis virginiana. Found statewide and common in all habitats, including urban areas. Typically, one litter born in early winter and another in spring. Gestation 12-13 days resulting in four to 20 young. Tiny young climb directly into marsupium and attach to one of 13 mammae; neonates failing to attach quickly perish. Diet includes fruits, other vegetative matter, invertebrates, eggs, and small vertebrates. Lowest Conservation Concern. (Fig. 149, p. 201)

## **INSECTIVORES** ORDER INSECTIVORA

#### SHREWS - FAMILY SORICIDAE

Northern Short-tailed Shrew Blarina brevicauda. Poorly known. Occurs only in northeastern Alabama. Occupies broad variety of habitats, including woodlands, grasslands, brushy fencerows, and marshy areas. Breeding begins in late winter and continues through summer, although there may be a lull in early and mid-summer. Gestation 21-22 days, with six to seven young per litter. Diet includes larval and adult insects, snails, slugs, spiders, centipedes, millipedes, earthworms, fungi, and plant material. MODERATE CONSERVATION CONCERN.

Southern Short-tailed Shrew Blarina carolinensis. Poorly known. Found statewide except for northeastern region. Little is known about species in Alabama, but may be common in a variety of habitats. MODERATE CONSERVATION CONCERN.

Least Shrew Cryptotis parva. Poorly known. Found statewide in grasslands and other upland areas, weedy fencerows, fields, roadsides, and meadows. Parturition occurs from early spring to mid-autumn. Several litters each averaging four to six young, produced annually. Young from early litters may breed later in same season. Plant and animal materials important in diet, which includes adult and larval insects, earthworms, spiders, centipedes, and snails. MODERATE CONSERVATION CONCERN.

Pygmy Shrew Sorex hoyi. Poorly known. Known only from northeastern Alabama. Occupies a diversity of habitats, but probably prefers mesic sites. Pregnant and lactating females recorded July-August, but little else known about reproductive biology. Probably one litter born annually. Diet primarily invertebrates. HIGH CONSERVATION CONCERN.

Southeastern Shrew *Sorex longirostris*. Poorly known. Found statewide, except southern tier of counties. Occupies a variety of habitats from bogs and marshes to upland grassy areas and forests, and even bare hillsides and dry upland hardwoods. May favor moist areas bordering swamps, marshes, lakes, and streams. More than one litter averaging four young may be produced annually. Important foods are spiders, larval insects, centipedes, slugs, snails, earthworms, and plant material. MODERATE CONSERVATION CONCERN.

#### MOLES - FAMILY TALPIDAE

Eastern Mole Scalopus aquaticus. Poorly known. Found statewide and common in a variety of habitats in both forested and unforested areas. Occupies moist, loose, sandy or loamy soils, and spends most of life underground. Gestation about five weeks, one litter produced annually, and, on average, four young born. Diet includes earthworms, larval and adult insects, other invertebrates, and plant material. Low Conservation Concern.

# BATS ORDER CHIROPTERA

## **VESPERTILIONID BATS - FAMILY VESPERTILIONIDAE**

Little Brown Myotis Myotis lucifugus. Found statewide; although common throughout its distribution, is rare in Alabama with no breeding colonies known. Elsewhere in distribution, groups of several thousand females form maternity colonies in buildings. Mating occurs before hibernation, but copulating pairs may be found in hibernacula throughout winter. In spring, a single young is born. Lifespans of greater than 30 years documented in wild. Diet includes a variety of insects, including flies, moths, and small beetles. HIGH CONSERVATION CONCERN.

Southeastern Myotis Myotis austroriparius. Occurs in southern half and western half of Alabama, but may be most common in southern tier of counties. Active year-round, it occupies caves, mines, and buildings, but may go into torpor for a few days when daily temperatures approach freezing. Only one maternity colony known in Alabama. Twins are born in spring and become volant in five to six weeks. HIGH CONSERVATION CONCERN.

Gray Myotis Myotis grisescens. Found statewide, except for southwestern quarter. Occupies deep caves near permanent water in winter and summer. Breeds in autumn before hibernation, but mating probably occurs in winter. One young born in June

becomes volant in 20-25 days. Forages primarily over water, along streams, and over lakes and ponds. Consumes a variety of small insects, including moths and mayflies. Lifespan may exceed 15 years. Listed as *endangered* by the U.S. Fish and Wildlife Service, HIGHEST CONSERVATION CONCERN.

Northern Long-eared Myotis Myotis septentrionalis. Poorly known. Found statewide, except southwestern region. Forested ridges appear favored over riparian woodlands. Hibernacula include caves and mines, but may use crevices in walls or ceilings. Summer roosts include tree holes, birdhouses, or behind loose bark or shutters of buildings. One young born in late spring or early summer weaned about a month after birth. HIGH CONSERVATION CONCERN.

Small-footed Myotis Myotis leibii. Probably occurs in northeastern Alabama because is known from adjacent areas of Tennessee and Georgia. Distribution maps often depict it occurring in Alabama, but no specimens known from state. MODERATE CONSERVATION CONCERN.

Indiana Myotis Myotis sodalis. Rare. Occurs in northern and eastern half of Alabama, but populations continue to decline distribution wide. Hibernates in caves, mostly in tight clusters. In summer, females form small maternity colonies in tree hollows and behind loose bark. A single offspring born in June or early July is weaned in 25-35 days. Diet includes small, soft-bodied insects, such as moths, flies, and beetles. Listed as endangered by the U.S. Fish and Wildlife Service. HIGHEST CONSERVATION CONCERN.

Silver-haired Bat *Lasionycteris noctivagans*. Poorly known. Probably found statewide, except for southern tier of counties. Little known of distribution and habits in Alabama. Probably present as a winter resident, or in spring and autumn migration, but apparently not in summer. In winter, hibernates in a variety of shelters, including buildings, caves, mines, crevices, and hollow trees. Not known to breed in Alabama. MODERATE CONSERVATION CONCERN.

Eastern Pipistrelle *Pipistrellus subflavus*. Found statewide and common. Occupies hollow trees, tree foliage, caves, mines, rock crevices, and buildings. Hibernates in winter, often with beads of water forming on fur from humid surroundings. In late May through early July, an average of two young are born. Diet includes a variety of insects, including leafhoppers, beetles, and flies. Lowest Conservation Concern.

Big Brown Bat *Eptesicus fuscus*. Found statewide and common. Roosts typically in human-made structures, but also in caves, mines, hollow trees, and crevices, or behind loose bark. Commonly inhabits bat houses, attics, and louvered attic vents. Copulates in autumn and winter, ovulation occurs in spring, and two young are born in late spring. Diet consists primarily of beetles, but flies, moths, bugs, and cicadellids also consumed. Lowest Conservation Concern. (Fig. 150, p. 201)

Eastern Red Bat *Lasiurus borealis*. Found statewide and common. Roosts in a variety of trees, but frequently uses clumps of Spanish moss. Often emerges early, while sun is in the western sky. Breeding may take place during southward migration in autumn, and copulation in flight has been observed. An average of four young are born in spring. Lowest Conservation concern.

Seminole Bat *Lasiurus seminolus*. Found statewide. Common in mixed coniferous and deciduous woodlands; often associated with Spanish moss. Parturition occurs late-May and early June, with two to four young born. Mostly forages at treetop level in forests, although also flies over open water, forest clearings, and along forest edges. Diet consists of flies, beetles, dragonflies, and hymenopterans. Lowest Conservation concern. (Fig. 151, p. 201)

Hoary Bat *Lasiurus cinereus*. Poorly known. Found statewide, but are few records of this large (avg. 25 g [1 oz.]) species in Alabama. Roosts in trees or shrubs, usually three to five meters (9-15 feet) above ground. Females bear two young in late spring. Migratory and may not breed in state, but some females may raise young here. MODERATE CONSERVATION CONCERN. (Fig. 152, p. 201)

Northern Yellow Bat *Lasiurus intermedius*. Rare and poorly known. Only a few records from the southern tier of counties. This relatively large (14-31 g [0.5-1.1 oz.]) bat inhabits coniferous and deciduous woodlands near permanent water. Often roosts in clumps of Spanish moss, but also in trees. Breeds in autumn and winter; two to four young born in spring. Diet consists of flies, bugs, dragonflies, beetles, and hymenopterans. **HIGH CONSERVATION CONCERN**.

Evening Bat Nycticeius humeralis. Found statewide, but may be most common in southern half. Primary habitat is deciduous forest where it roosts in hollow trees, under loose bark, and in human-made structures, such as outbuildings, churches, belfries, and attics. One to three young (usually two) born in early June. Diet consists of a variety of insects, including moths, beetles, flies, bugs, and flying ants. Lowest Conservation Concern.

Rafinesque's Big-eared Bat Corynorhinus rafinesquii. Poorly known. Found statewide, but among least-known bats in region. In summer, roost sites may be behind loose bark, in caves, crevices, and hollow trees, and in unoccupied buildings, abandoned mines and wells, and other human-made structures. In winter, may hibernate briefly in open and well-lighted hibernacula. Mating occurs in autumn and winter; one young born in late spring. Diet primarily moths. HIGHEST CONSERVATION CONCERN.

### FREE-TAILED BATS - FAMILY MOLOSSIDAE

Brazilian Free-tailed Bat *Tadarida brasiliensis*. Poorly known. Possibly found statewide, but most remaining populations are in southern half. Occurs only in human-made structures. Essentially nonmigratory and does not hibernate, but summer and winter roosts may be in different localities. Breeds in March, gestation is 11-12 weeks, and one young born in June. Diet primarily moths. **HIGH CONSERVATION CONCERN**.

## ARMADILLOS, SLOTHS, AND ANTEATERS ORDER XENARTHRA

#### ARMADILLOS - FAMILY DASYPODIDAE

Nine-banded Armadillo *Dasypus novemcinctus*. Found statewide and common in woodlands, forest edges, savannas, and brushy areas. Breeding occurs in summer, implantation is delayed about 14 weeks, and four quadruplets are born in late winter or early spring after a gestation of 120 days. Diet consists primarily of insects, their larvae, and invertebrates, but fruits, mushrooms, eggs, and small vertebrates also consumed. Lowest Conservation concern. (Fig. 153, p. 201)

## RABBITS, HARES, AND PICAS ORDER LAGOMORPHA

#### RABBITS AND HARES - FAMILY LEPORIDAE

Marsh Rabbit *Sylvilagus palustris*. Poorly known. Restricted to southernmost counties. Primarily occurs in and around marshes and swamps. Sexually active year-round, gestation period 30-37 days, several litters averaging three to five young born annually. Feeds on variety of lowland plants, including cattails, rushes, and cane, and also consumes twigs and leaves of trees, shrubs, and woody vines. **HIGH CONSERVATION CONCERN**.

Swamp Rabbit *Sylvilagus aquaticus*. Poorly known. Distributed statewide, except for southern tier of counties along Florida Panhandle. Found in floodplain forests, wooded bottomlands, briar and honeysuckle patches, and canebrakes. Produces up to eight litters averaging three to six young annually. Diet includes a variety of plant material, such as grasses, sedges, shrubs, twigs, and bark. Low Conservation Concern.

Eastern Cottontail Sylvilagus floridanus. Common and found statewide. Primarily occurs in deciduous forests and forest edges, but also in grasslands, along fencerows, and in urban areas. Produces up to seven litters averaging three to five young annually; gestation about 30 days. Forbs and grasses comprise most of diet in summer, but consumption of twigs and tree bark increases in winter. Lowest Conservation Concern. (Fig. 154, p. 201)

Appalachian Cottontail *Sylvilagus obscurus*. Poorly known. Records only from northern third of Alabama. Inhabits dense woodlands and mountainous areas. Gestation 28 days; average litter size is five with two to three young produced annually. Diet mostly grass and clover; other foods include herbaceous plants and shrubs, twigs, buds, seeds, and fruit. **HIGH CONSERVATION CONCERN**.

# RODENTS ORDER RODENTIA

## SQUIRRELS - FAMILY SCIURIDAE

Eastern Chipmunk *Tamias striatus*. Common. Found statewide, except for extreme southwestern and southeastern regions. Occupies wooded areas with dense canopy and sparsely covered forest floor, open brushy habitats, ravines, deciduous growth along streams, and urban areas. Gestation 31-32 days; two litters averaging four to five young produced each year. Seeds, nuts, insects, other invertebrates, and fungi are important foods. Lowest Conservation Concern.

Woodchuck *Marmota monax*. Poorly known. Distribution includes northern two-thirds of state. Occupies forest edges and open fields and pastures near brushy fencerows or other cover Breeding occurs upon emergence from hibernation in spring. Gestation 31-33 days; one litter averaging four to five young produced annually. Diet includes various weedy plants, but clover and alfalfa favored. Fruits and agricultural crops also consumed. Lowest Conservation Concern. (Fig. 155, p. 201)

Gray Squirrel *Sciurus carolinensis*. Common. Found statewide in hardwood forests, mixed forests, and urban areas. An important game species, active throughout year. Two litters of two to four young born annually, one in late winter and another in summer; gestation about 44 days. Diet includes seeds, fruits, flowers, leaves, bark, and some insects, eggs, and young birds. Lowest Conservation Concern. (Fig. 156, p. 201)

Fox Squirrel *Sciurus niger*. Found statewide, this large tree squirrel favors mature deciduous and pine-oak woodlands, but also occurs at forest edges and in riparian woodlands. Two reproductive peaks occur in late winter and mid-late summer. Gestation about 45 days, with an average of three young born. Diet is acorns, pine seeds, other nuts, and a wide variety of plant and animal material, including fruits, corn, and other grains. Low Conservation Concern. (Fig. 157, p. 201)

Southern Flying Squirrel *Glaucomys volans*. Found statewide. Most common in mature, broad-leaved forests, but also found in coniferous-deciduous woodlands, and urban areas. Nocturnal existence belies its common occurrence. Breeds in mid-summer to early winter. Gestation about 40 days, with an average litter size of two to three. Foods are nuts of deciduous trees, such as oaks and hickories, but also consumes seeds, fruits, buds, bark, fungi, insects, eggs, and small vertebrates. Lowest Conservation Concern. (Fig. 158, p. 201)

## POCKET GOPHERS - FAMILY GEOMYIDAE

Southeastern Pocket Gopher Geomys pinetis. Poorly known. Seemingly less common now than previously; once occupied southern half of Alabama. Usually occurs in dry,

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sandy soils, but may inhabit well-drained, gravelly, upland sites. Peaks of reproductive activity occur February-March and June-August. Females produce two litters of about two young annually. HIGH CONSERVATION CONCERN.

#### BEAVERS - FAMILY CASTORIDAE

Beaver Castor canadensis. Once extirpated, or nearly so, now common. Found statewide in all habitats with open water. Considered a pest in some areas, because of flooding caused by construction of dams. In April-June, three to five young born after a gestation of about 107 days. Sexual maturity reached at two years. Diet includes leaves, branches, and bark of most kinds of woody plants that grow near water. Lowest Conservation Concern. (Fig. 159, p. 202)

#### RATS AND MICE - FAMILY MURIDAE

Marsh Rice Rat *Oryzomys palustris*. Common and found statewide in wet meadows and dense vegetation near marshes, swamps, streams, ponds, and ditches. Probably breeds throughout year. Gestation 21-28 days, average litter size four to five, and sexual maturity attained at six to eight weeks. Diet includes seeds and green plants, but insects, snails, and other animal materials are consumed. Lowest Conservation concern.

Eastern Harvest Mouse *Reithrodontomys humulis*. Poorly known. Once common in old fields containing dense stands of weeds and grasses, but may be declining in Alabama. Breeds throughout year, gestation 21-22 days, and litter of two to three. Seeds comprise most of diet, but insects and green vegetation also eaten. MODERATE CONSERVATION CONCERN.

Oldfield Mouse *Peromyscus polionotus*. Poorly known. Primarily distributed in sandy-soiled habitats in eastern and southern Alabama, but also occurs in west-central and northwestern parts of state. Occurs in fallow fields with herbaceous vegetation, and along roadsides in agricultural areas. Breeds throughout year. Gestation about 22 days with an average of four young born. Diet mostly consists of seeds of grasses and herbs, but green plants and insects also consumed. MODERATE CONSERVATION CONCERN. (Fig. 160, p. 202)

Alabama Beach Mouse *P. polionotus ammobates*. Known only from coastal dune areas of Baldwin County, Alabama. Distribution continues to shrink due to construction of beach-front buildings and associated destruction of habitat. Monogamous, with strong pair bonds; reproduction peaks in late autumn and early winter. Gestation about 28 days; litter size varies from two to eight. Diet includes sea oats, bluestems, and a variety of insects. Listed as *endangered* by the U.S. Fish and Wildlife Service. HIGHEST CONSERVATION CONCERN.

Perdido Key Beach Mouse *P. polionotus trissylepsis*. Known only from Perdido Key, Baldwin County, Alabama. Storms and habitat destruction have reduced distribution from entire length of Perdido Key to a few remnant and reintroduced populations.

Although there are distinct morphological and genetic differences, ecology and reproduction similar to the Alabama beach mouse. Listed as *endangered* by the U.S. Fish and Wildlife Service. HIGHEST CONSERVATION CONCERN.

Cotton Mouse *Peromyscus gossypinus*. Common. Found statewide in dense underbrush, bottomland hardwood forests, and a variety of other habitats, including old fields, upland forests, hammocks, and swamps. Except for summer, breeds year-round. Gestation about 23 days; litter size averages four. This opportunistic omnivore consumes insects, spiders, slugs, and snails, but also eats seeds and fungi. Lowest Conservation concern.

White-footed Mouse *Peromyscus leucopus*. Poorly known. Occurs in northern two-thirds of state. Common in woodlands with fallen logs, brush piles, and rocks, and in shrubs along fencerows and streams. Breeds year-round, with reduced activity in summer. Several litters of three to four produced annually; gestation 22-23 days. Females may be pregnant and lactating simultaneously. Diet includes seeds, nuts, fruits, other plant materials, and small invertebrates. Lowest Conservation concern.

Golden Mouse *Ochrotomys nuttalli*. Common in a variety of habitats, including woodlands, floodplains, borders of fields, and thickets bordering swamps and dense woods. Highly social; up to eight have been found in same nest. Breeding occurs all year. Gestation 25-30 days; litter size usually two to three. Seeds and invertebrates form majority of diet. Lowest Conservation concern.

Hispid Cotton Rat Sigmodon hispidus. Found statewide, especially in grassy areas of fields and along roadways. Populations fluctuate greatly among years, but usually abundant in densely vegetated habitats. Active day and night. Prolific breeder; gestation about 27 days; one to 15 young per litter; and young mature in about eight weeks. Primarily herbivorous, but will consume invertebrates, small vertebrates, and bird eggs. Lowest Conservation Concern. (Fig. 161, p. 202)

Eastern Woodrat *Neotoma floridana*. Poorly known. No recent surveys; populations may be declining. Occupies woodland and brushy habitats south of Tennessee River. Usually found associated with rocky outcrops, but also in areas with dense vegetation. Mating occurs throughout year with an average of two to three young born after a gestation of about 35 days. MODERATE CONSERVATION CONCERN.

Allegheny Woodrat *Neotoma magister*. Probably restricted to region north of Tennessee River. Possibly confined to areas with rocky outcrops, crevices, caves, and boulder fields, but also may occupy woodlands and brushy areas. Breeds throughout year; litter size of two to three; gestation about 35 days. Diet consists of plant materials. **HIGH CONSERVATION CONCERN**.

Prairie Vole Microtus ochrogaster. Poorly known. Occupies areas with dense grasses, such as pastures, roadsides, and edges of fields in north-central Alabama. Breeds throughout

year with peaks in spring and autumn. After a gestation of about 21 days, three to five young are born. Green vegetation commonly eaten in summer, whereas roots, seeds, bark, and stems commonly eaten in winter. MODERATE CONSERVATION CONCERN.

Pine Vole *Microtus pinetorum*. Found statewide, except for southwestern section. Occupies a wide range of habitats, including leaf litter, grassy fields with brush and brambles, and beneath mats of dense vegetation. Breeds throughout year; gestation about three weeks; average litter size three; young fully mature at 10-12 weeks. Diet includes grasses, stems, roots, seeds, nuts, and bark, which are stored in burrows. Low Conservation Concern.

Muskrat *Ondatra zibethicus*. Found nearly statewide, except counties bordering Florida Panhandle. Habitats include saline, brackish, and freshwater streams; marshes; ponds; lakes; ditches; and rivers. Produces up to five to six litters of six to seven young annually. Gestation about 30 days. Feeds mostly on roots and basal parts of aquatic vegetation, but also crayfish, fishes, mollusks, turtles, and other animal matter. Lowest Conservation Concern. (Fig. 162, p. 202)

Black Rat *Rattus rattus*. *Exotic*. Breeder. Also called "roof rat" because of its climbing capabilities. A commensal ("sharing the table") rodent brought to the United States by early European colonists. Produces up to 12 litters of eight young annually. Gestation period about 24 days. Requires food, water, and harborage provided by humans. Often displaced by Norway rat, but when co-inhabiting same areas, usually spatially separated vertically. Often targeted for eradication because of potential economic damage and health concerns.

Norway Rat *Rattus norvegicus*. *Exotic*. Breeder. Also known as "sewer or wharf rat." A commensal rodent brought to the United States by early European colonists, albeit considerably later (ca. 1775) than the black rat and house mouse. Produces up to 12 litters of eight or nine young annually. Gestation period about 24 days. Requires food, water, and harborage provided by humans. Often targeted for eradication because of potential economic damage and health concerns.

House Mouse Mus musculus. Exotic. Breeder. A commensal rodent brought to the United States by early European colonists. Produces up to 14 litters of five or six young annually. Gestation period about 20 days. Not nearly as dependent on food, water, and harborage provided by humans as black and Norway rats; often found in habitats associated with native rodents fairly distant from human habitation. Often targeted for eradication because of potential economic damage and health concerns.

### JUMPING MICE AND JERBOAS - FAMILY DIPODIDAE

Meadow Jumping Mouse Zapus hudsonius. Poorly known. Populations may be declining, but no recent surveys. Found primarily in Piedmont region of northeastern

Alabama. Occupies variety of habitats with dense vegetation, including overgrown fields and thick vegetation near ponds, marshes, and streams. Up to three litters of about five young may be produced April-August. Seeds, grasses, fruits of some woody shrubs, insects, and fungi are consumed. HIGH CONSERVATION CONCERN.

#### **NUTRIAS - FAMILY MYOCASTORIDAE**

Nutria Myocaster coypus. Exotic. Breeder. A South American native introduced into the United States for fur farming and weed control. Occupies fresh and brackish wetlands in southern Alabama. Known to cause damage to crops, drainage systems, and natural plant communities.

# CARNIVORES ORDER CARNIVORA

## WOLVES, DOGS, FOXES, AND JACKALS - FAMILY CANIDAE

Coyote Canis latrans. Found statewide, including urban areas. Common in all habitats. Usually breeds February-March. Gestation about 60 days; litter size about six. Diet extremely varied and includes rodents, rabbits, birds, eggs, many kinds of fruits, domestic poultry, livestock, and watermelons. Lowest Conservation Concern.

Red Wolf Canis rufus. Extirpated. Once inhabited a variety of habitats statewide. Roamed in small groups and fed on small to mid-sized wild mammals. Also, often fed on small domestic animals such as sheep, goats, pigs, and sometimes calves. Reported on verge of extinction in Alabama in 1921. Last stronghold was rough, hilly region from Walker County northwestward to Colbert County. Listed as endangered by the U.S. Fish and Wildlife Service.

Red Fox *Vulpes vulpes*. Common statewide in forested uplands interspersed with pastures and farmland. Breeding occurs January-February; gestation about 50 days; litter size four to five. Mice and rabbits are important components of diet, but birds, eggs, plant material, and insects also consumed. Lowest Conservation Concern. (Fig. 163, p. 202)

Gray Fox *Urocyon cinereoargenteus*. Common in forested habitats statewide. Breeding peaks in February-March; gestation 50-60 days; litter size three to five. Diet includes many plant and animal species, including rodents, birds, eggs, and carrion. Lowest Conservation Concern.

#### **BEARS - FAMILY URSIDAE**

Black Bear *Ursus americanus*. Rare. Once found statewide, but now extirpated from all except an area just north of Mobile, where they still breed. Transients from Georgia and Florida also occasionally enter the state. Occupies woodland and swampland habitats. Mating occurs May-July with two to three young born in January-February after a seven-month gestation. A variety of plant and animal materials, including some agricultural crops, consumed depending upon availability. **HIGHEST CONSERVATION CONCERN**.

# EARED SEALS, FUR SEALS, AND SEA LIONS - FAMILY OTARIJDAE

California Sea Lion Zalophus californianus. Accidental. Known from a single observation at Sand Point Light, Mobile Bay, prior to 1984.

## RACCOONS, RINGTAILS, AND COATIS - FAMILY PROCYONIDAE

Raccoon *Procyon lotor*. Common in all habitats statewide, including urban areas. Often associated with water, especially bottomland swamps, marshes, and flooded woodlands. This opportunistic omnivore consumes an unusually wide range of plant and animal foods. Breeding occurs December-June with a peak February-March; gestation about 65 days; litter size two to five. Lowest Conservation Concern. (Fig. 164, p. 202)

Ringtail Bassariscus astutus. Accidental. Known only from two animals collected in Chambers and Montgomery Counties that may have been released from captivity. No evidence of a breeding population in Alabama or adjacent states. Occupies a variety of habitats throughout distribution, which extends from California across Louisiana and from southwestern Oregon to southern Mexico. Principal foods are arthropods, small mammals, and fruits, but diet varies with availability and location. Breeds February-May, but most occurs March-April. Following about a 50-day gestation, one to four young are born.

## WEASELS, BADGERS, AND OTTERS - FAMILY MUSTELIDAE

Long-tailed Weasel *Mustela frenata*. Poorly known. Probably found statewide, but little known about current status. Lives in woodlands, forest edges, fencerows, agricultural, and urban areas. Small mammals form important part of diet, along with other vertebrates and invertebrates. Mating occurs July-August, there is delayed implantation, and five to eight young are born mid-spring. **HIGH CONSERVATION CONCERN**.

Mink Mustela vison. Poorly known. This semiaquatic species occurs statewide, usually near permanent water. Status of populations unknown. Breeding occurs February-April; gestation about 30 days; and average litter size of four. Diet consists primarily of rodents,

but also includes a variety of other vertebrates and invertebrates. Low Conservation Concern.

River Otter *Lontra canadensis*. Poorly known. Probably present statewide in association with rivers, creeks, and lakes, especially open water bordered with wooded habitat. Current status of populations unknown. In late winter or early spring, copulation usually occurs in water, there is delayed implantation, and a litter of one to six young is born in 290-380 days. Low Conservation Concern.

#### SKUNKS - FAMILY MEPHITIDAE

Striped Skunk Mephitis mephitis. Found statewide, especially in open areas, forest edges, and urban habitats. Although usually common, abundance varies significantly within Alabama; some regions having high populations and others having few, or no, individuals present. Most breeding occurs February-April. Low Conservation Concern. (Fig. 165, p. 202)

Eastern Spotted Skunk *Spilogale putorius*. Found in a variety of habitats such as pastures, woodlands, forest edges, and farmlands. Although statewide in distribution, little known about this species in Alabama. Breeding occurs March-April, and there may be a second litter in late summer. **HIGH CONSERVATION CONCERN**.

### CATS - FAMILY FELIDAE

Puma *Puma concolor*. *Extirpated*. Probably was statewide in distribution in all habitats, especially remote upland woodlands, rough terrain, and bottomland swamps. Although sightings are still commonly reported in Alabama, these are likely misidentifications of domestic dogs and cats, coyotes, and bobcats. Some puma sightings have been traced back to escapees from captivity. The only known self-sustaining wild population closest geographically to Alabama is the Florida panther (*P. c. coryi*), which is listed as *endangered* by the U.S. Fish and Wildlife Service.

Bobcat *Lynx rufus*. Common statewide in a wide array of habitats including dense understory, bottomland hardwood forests, swamps, and farmlands. Breeding peaks December-April, but young may be born anytime during the year. Diet includes many kinds of vertebrates and invertebrates. Lowest Conservation Concern.

Jaguarundi Herpailurus yagouaroundi. Accidental. Rare sightings reported from south-western and central Alabama, but there is no evidence of a breeding population in Alabama or adjacent states. Listed as *endangered* by the U.S. Fish and Wildlife Service.

# SIRENIANS ORDER SIRENIA

#### MANATEES - FAMILY TRICHECHIDAE

Manatee *Trichechus manatus*. Rare in Alabama waters; known from regular annual sightings in late spring, summer, and early fall in inland waterways around Mobile Bay. Individuals may be migrants from populations that occur along Gulf Coast of Florida. Listed as *endangered* by the U.S. Fish and Wildlife Service. HIGHEST CONSERVATION CONCERN.

# EVEN-TOED HOOFED MAMMALS ORDER ARTIODACTYLA

### DEER, ELK, CARIBOU, AND MOOSE - FAMILY CERVIDAE

Elk Cervus elaphus. Extirpated. May have been found statewide, except for southern third. A mix of open and densely wooded habitats probably were occupied by the eastern subspecies (C. e. canadensis), which is now extinct. Re-introductions to states within former eastern distribution have been successfully made with some of the western subspecies.

White-tailed Deer Odocoileus virginianus. This common and important game species is a browser and grazer found statewide, including urban habitats. Throughout most of its distribution, breeding occurs October-January, but in Alabama, breeding usually takes place January-February with young born in late summer. Lowest Conservation Concern. (Fig. 166, p. 202)

Fallow Deer *Dama dama*. *Exotic*. Breeder. Native to Europe. Has been introduced widely around the world, including the area around Camden, Alabama. Still a very small population near Miller's Ferry.

#### SWINE - FAMILY SUIDAE

Feral Swine Sus scrofa. Exotic. Breeder. Probably introduced by European settlers originally, although subsequent releases of European "wild boars" and illegal trap and transplant operations by hunting enthusiasts have encouraged their hybridization and spread. Considered a direct and aggressive competitor with native wildlife and destroyer of natural plant communities of the state. Every opportunity for eradication should be undertaken.

## ANTELOPES, BISON, CATTLE, GOATS, SHEEP - FAMILY BOVIDAE

Bison *Bison bison*. **Extirpated.** Plains subspecies (*B. b. bison*) once occupied mixed habitats associated with open grasslands and adjacent woodlands. Distribution was throughout most of state, except southernmost counties.



Fig. 149. Virginia Opossum, Didelphis virginiana, p. 188. Photo–ADCNR, Mark Sasser



Fig. 150. Big Brown Bat, Eptesicus fuscus, p.190. Photo–J. Scott Altenbach



Fig. 151. Seminole Bat, Lasiurus seminolus, p.191. Photo-/. Scott Altenbach



Fig. 152. Hoary Bat, Lasiurus cenereus, p.191. Photo-J. Scott Altenbach



Fig. 153. Nine-banded Armadillo, Dasypus novemcinctus, p. 192. Photo-Ericha Shelton



Fig. 154. Eastern Cottontail, Sylvilagus floridanus, p. 192. Photo–Ericha Shelton



Fig. 155. Woodchuck, Marmota monax, p. 193. Photo-Keith Guyse



Fig. 156. Gray Squirrel, Sciurus carolinensis, p. 193. Photo–Ralph Mirarchi



Fig. 157. Fox Squirrel, Sciurus niger, p. 193. Photo-ADCNR. Mark Sasser



Fig. 158. Southern Flying Squirrel, Glaucomys volans, p. 193. Photo—ADCNR, Sam Spencer





Fig. 160. Oldfield Mouse, Peromyscus polionotus, p. 194. Photo-Nick Holler

Fig. 159. Beaver, Castor canadensis, p.194. Photo-USFWS



Fig. 161. Hispid Cotton Rat, Sigmodon hispidus, p. 195. Photo-Nick Holler



Fig. 162. Muskrat, Ondatra zibethicus, p. 196. Photo-USFWS



Fig. 163. Red Fox, Vulpes vulpes, p. 197. Photo-USFWS



Fig. 164. Raccoon, Procyon lotor, p. 198. Photo-USFWS



Fig. 165. Striped Skunk, Mephitis mephitis, p. 199. Photo-ADCNR, Keith Guyse



Fig. 166. White-tailed Deer, Odocoileus virginianus, p. 200. Photo-Ralph Mirarchi

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