Mammalian Taxonomy

This list includes most of the world's orders of mammals. It also includes the families, genus, and species for all extant Alabama species (excluding a few with limited evidence), the families of several familiar species, and the family, genus, and species of several common domesticated species. You should be familiar with all taxa listed. All underlined taxonomic names will link to the taxon or species page on Animal Diversity Web, which may help you to study.

Alabama species in **blue** and **domesticated species are in orange**. *=introduced or exotic in Alabama; Taxa with a recent name change will be marked with **. In these cases, the name on Animal Diversity Web or in other text may not match this list.

You will need to know all names and classifications to the family level for exam 1. You will be learning all of the species names for the lab practicals.

The superscript label following the common name describes what you required to recognize, including S&S for skin and skull, P&S for photo and skull, Photo for photo only, and Skin for skin only. Assume animal ID is to species unless otherwise noted.

Class **Mammalia**

Subclass <u>Prototheria</u> – egg laying mammals Order <u>Monotremata</u> – egg laying mammals Family <u>Tachyglossidae</u> – echidnas Family <u>Ornithorhynchidae</u> - platypuses

Subclass Theria -mammals that give birth to live young

Infraclass Metatheria - marsupials

Order <u>Didelphimorphia</u> – American marsupials Family **Didelphidae-** American opossums

<u>Didelphis virginiana</u> - Virginia opossum ^{S&S}

Order **Diprotodontia** – koalas, wombats, possums, kangaroos, wallabies

Family **Phascolarctidae** - koalas Family **Vombatidae** - wombats

Family Macropodidae - kangaroos, wallabies

Infraclass **Eutheria** – placental mammals

Order Tenrecoidea** - tenrecs, golden moles

Order Macroscelidea - elephant shrews

Order **Tubulidentata** - aardvarks

Order **Hyracoidea** - hyraxes

Order Proboscidea - elephants

Family **Elephantidae** - elephants

Order Sirenia - dugongs, manatees, sea cows

Family **Trichechidae** - manatees

Trichechus manatus - West Indian manatee P&S

Order Cinquiata - armadillos

Family **Dasypodidae** - armadillos

Dasypus novemcinctus - nine-banded armadillo S&S

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Order <u>Pilosa</u> - sloths and anteaters
Order <u>Scandentia</u> - treeshrews
Order <u>Dermoptera</u> – flying lemurs
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Order <u>Primates</u> – lemurs, monkeys, apes, humans Family <u>Hominidae</u> - humans, great apes <u>Homo sapiens</u> - humans

Order Lagomorpha – pikas, rabbits, hares

Family Leporidae – rabbits, hares

<u>Sylvilagus aquaticus</u> - swamp rabbit ^{S&S to genus} <u>Sylvilagus floridanus</u> - eastern cottontail ^{S&S to genus} <u>Sylvilagus obscurus</u> - Appalachian cottontail ^{S&S to genus} <u>Sylvilagus palustris</u> - marsh rabbit ^{S&S to genus}

Order Rodentia – squirrels, beavers, rats, mice, porcupines, guinea pigs

Family **Castoridae** - beavers

Castor canadensis - American beaver S&S

Family **Geomyidae** – pocket gopher

Geomys pinetis - southeastern pocket gopher S&S

Family **Zapodidae** – jumping mouse

Zapus hudsonius - meadow jumping mouse Skin

Family **Cricetidae** – new world mice

Microtus ochrogaster - prairie vole Skin to genus
Microtus pinetorum - woodland vole Skin to genus
Ondatra zibethicus - muskrat S&S
Neotoma floridana - eastern woodrat S&S to genus
Neotoma magister - Allegheny woodrat S&S to genus
Ochrotomys nuttalli - golden mouse Skin
Peromyscus gossypinus - cotton mouse Skin to genus
Peromyscus leucopus - white-footed mouse Skin to genus
Peromyscus maniculatus - deer mouse Skin to genus
Peromyscus polionotus - oldfield mouse Skin to genus
Reithrodontomys humulis - eastern harvest mouse Oryzomys palustris - marsh rice rat Skin

Family Muridae – old world mice and rats

Mesocricetus auratus - Syrian hamster Photo

<u>Mus musculus</u>* - house mouse Skin - domestic = laboratory mouse <u>Rattus norvegicus</u>* - brown rat SkS to genus - domestic = laboratory rat <u>Rattus rattus</u>* - house rat SkS to genus

Family <u>Caviidae</u> – cavies, guinea pigs, capybara

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<u>Cavia porcellus</u> - guinea pig ^{Photo}

Family Myocastoridae - nutria

Myocastor coypus* - nutria P&S

Family **Sciuridae** – squirrel

<u>Sciurus carolinensis</u> - eastern gray squirrel ^{S&S} <u>Sciurus niger</u> - eastern fox squirrel ^{S&S} <u>Glaucomys volans</u> - southern flying squirrel ^{S&S}

Marmota monax – woodchuck ^{Ś&S}

Tamias striatus - eastern chipmunk S&S

Order Scandentia - treeshrews

Order Soricomorpha - shrews and moles

Family **Soricidae** - shrews

Blarina brevicauda - northern short-tailed shrew Skin to genus & Skull to family

Blarina carolinensis - southern short-tailed shrew Skin to genus & Skull to family

Cryptotis parva - least shrew Skin to species & Skull to family

Sorex fumeus - smoky shrew Skin to genus & Skull to family

Sorex hoyi - pygmy shrew Skin to genus & Skull to family

<u>Sorex longirostris</u> - southeastern shrew Skin to genus & Skull to family

Family Talpidae - moles

Scalopus aquaticus - eastern mole S&S

Order Erinaceomorpha - hedgehogs

Order Carnivora – cats, dogs, anteaters, bears, otters, seals, and sea lions

Family Felidae - cats

Lynx rufus - bobcat S&S

Puma concolor - cougar P&S

Felis catus - domestic cat P&S

Family Canidae - dogs

Canis latrans - covote P&S

Canis familiaris - domestic dog P&S

Canis rufus - red wolf P&S

Urocyon cinereoargenteus - gray fox S&S

Vulpes vulpes - red fox S&S

Family **Ursidae** - bears

Ursus americanus - American black bear P&S

Family **Mustelidae** – weasles, otters, badgers

<u>Lontra canadensis</u> - northern river otter ^{S&S} <u>Mustela frenata</u> - long-tailed weasel ^{S&S}

Neovison vison - American mink S&S

Family Mephitidae – skunks

Mephitis mephitis - striped skunk S&S

Spilogale putorius - eastern spotted skunk S&S

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Family Odobenidae – walruses
       Family <u>Otariidae</u> – sea lions, <u>fur seals</u>
       Family Phocidae - seals
       Family Procyonidae – raccoon, coati
              Procyon lotor - raccoon S&S
Order Pholidota - pangolins
Order Perissodactyla - horses, zebras, tapirs, rhinoceroses
       Family Equidae - horses, zebras, and relatives
              Equus caballus - domestic horse P&S
       Family Rhinocerotidae – rhinoceroses
Order Artiodactyla- swine, peccaries, hippopotamuses, camels, deer
       Family Suidae – hogs and pigs
              Sus scrofa* - wild boar P&S - domestic = Sus scrofa domesticus
       Family Camelidae - camels, guanacos
       Family Giraffidae - giraffes, okapis
       Family Cervidae - deer, elk, caribou, moose
              Odocoileus virginianus - white-tailed deer P&S
       Family Antilocapridae - pronghorns
       Family Bovidae – bison, cattle, antelopes, sheep
              Bos taurus – cattle P&S
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Family **Hippopotomidae** - hippopotamuses

Order Cetacea - whales, porpoises, dolphins Suborder Mysticeti - baleen whales

Suborder **Odontoceti** - toothed whales, porpoises, dolphins Family **Delphinidae** - dolphins, killer whales, pilot whales Orcinus orca - killer whale Photo Tursiops truncatus - Common bottlenose dolphin Photo Stenella frontalis - Atlantic Spotted Dolphin Photo Family Physeteridae – sperm whales Physeter macrocephalus - sperm whale Photo

Order **Chiroptera**

Suborder Yinpterochiroptera - Old world bats: flying foxes, horseshoe bats, false-vampire bats

Suborder **Yangochiroptera** - New world bats: fishing bats, sac-wings bats, leaf-nosed bats, free-tailed bats, common bats

Family Molossidae - free-tailed bats Tadarida brasiliensis - Brazilian free-tailed bat Skin

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Family <u>Vespertilionidae</u> – <u>common bats, i.e. evening and vesper bats</u>

Eptesicus fuscus - big brown bat Skull to family & Skin

<u>Lasiurus borealis</u> - Eastern red bat ^{Skull to family & Skin}

<u>Lasiurus cinereus</u> - hoary bat ^{Skull to family & Skin}

<u>Lasiurus intermedius</u> - northern yellow bat ^{Skull to family & Skin}

Lasiurus seminolus - Seminole bat Skull to family & Skin

Nycticeius humeralis - evening bat Skull to family & Skin

Perimyotis subflavus - tri-colored bat Skull to family & Skin

Corynorhinus rafinesquii - Rafinesque's big-eared bat Skull to family & Skin

Lasionycteris noctivagans - silver-haired bat Skull to family & Skin

Myotis austroriparius - southeastern myotis Skin to genus & skull to family

Myotis grisescens - gray myotis Skin to genus & skull to family

Myotis leibii - eastern small-footed myotis Skin to genus & skull to family

Myotis lucifugus - little brown bat Skin to genus & skull to family

Myotis septentrionalis - northern long-eared myotis Skin to genus & skull to family

Myotis sodalis - Indiana myotis Skin to genus & skull to family

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Meaning of scientific names of mammals of Alabama

Compiled by John L. Hunt, Lisa A. McWilliams, and Troy L. Best.

These may help you to remember the scientific names. You will not be tested on these.

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In alphabetical order by genera.
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Bassariscus--Greek for "a little fox."

astutus--Latin for "cunning."

Bison--Greek for "wild ox."

Blarina--a coined name (a made-up word).

brevicauda--Latin for "short-tailed."

carolinensis--means "of Carolina," a reference to the origin of the type specimen.

Bos--Latin for "ox."

taurus--Latin for "bull."

Canis--Latin for "dog."

familiaris--Latin for "domestic or home-like."

latrans--Latin for "barker."

rufus--Latin for "red."

Castor--Greek for "beaver."

canadensis--Latin for "of Canada."

Cervus--Latin for "deer."

elaphus--Greek for "deer."

Corynorhinus--from the Greek coryn, meaning "club," and rhinos, meaning "nose."

rafinesquii--patronym for Constantine S. Rafinesque, an early American naturalist.

Cryptotis--Greek for "hidden ear."

parva--Latin for "small."

Dama-- from the Latin dama, meaning "fallow deer."

Dasypus--Greek for "hairy foot." Armadillos do not have hairy feet; Linnaeus may have meant "rough-footed."

novemcinctus--Latin for "nine-banded."

Didelphis--Greek for "double womb," referring to the paired uteri.

virginiana--refers to Virginia, origin of the type specimen.

Eptesicus--may be from the Latin or Greek words for "house flier." Big brown bats often live in houses.

fuscus--Latin for "brown."

Equus--Latin for "horse."

caballus--Latin for "pack horse."

Felis--Latin for "cat."

silvestris--Latin for "of the woods."

Geomys--from the Greek ge or geo meaning "earth," and mys, meaning "mouse." pinetis--Latin for "of the pines."

Glaucomys--from the Greek glaukos, meaning "gray," and mys, meaning "mouse." volans--Latin for "flying."

Lasionycteris--from two Greek words, lasios, meaning "hairy," and nycteris, meaning "bat." noctivigans--from the Latin nox, meaning "night," and vagans, meaning "wanderer."

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Lasiurus--from the Greek lasios, meaning "hairy," and oura, meaning "tail," a reference to the heavily furred uropatagium.

borealis--Latin for "northern."

cinereus--Latin for "ashen" or "gray."

intermedius--Latin for "intermediate."

seminolus--refers to the Seminole Indians, who lived in the region where the type specimen was obtained.

Lontra--Latin for "otter."

canadensis--Latin for "of Canada."

Lynx--Greek for "bobcat."

rufus--Latin for "red."

Marmota--Latinized Italian "marmotta," which means "mountain mouse."

monax--from an American Indian name for the woodchuck that means "the digger."

Mephitis--Latin for "smelly."

Meriones--Greek for "companion of Idomeneus."

unguiculatus--Latin for "nail or claw."

Microtus--from the Greek mikros, meaning "small," and otus, meaning "ear."

ochrogaster--from the Greek ochro, meaning "yellow," and gaster, meaning "belly." pinetorum--Latin for "belonging to the pines."

Mus--Latin for "mouse."

musculus--Latin for "little mouse."

Mustela--Latin for "weasel."

frenata--from the Latin frenum, meaning "bridle," referring to the facial markings of the weasel.

Myocastor--Greek for "mouse beaver."

coypus--from "coypu" in the Araucanian Indian language of Chile and Argentina.

Myotis--from the Greek words mys, meaning "mouse," and otus, meaning "ear."

austroriparius--from two Latin words, austro, meaning "southern," and riparius, which means "frequenting the banks of streams."

grisescens--from the Latin word griseus, meaning "becoming gray."

leibii--a patronym recognizing George Leib, collector of the type specimen.

lucifugus--Latin for "to flee from light."

septentrionalis--Latin for "of the northern regions."

sodalis--Latin for "companion," a reference to the habit of hibernating in large numbers.

Neotoma--from the Greek neos, meaning "new," and tomos, meaning "cut." This refers to the fact that it was a new kind of mammal with cutting teeth, distinguishing it from Mus, to which it was originally assigned.

floridana--Latin for "of Florida," where the type specimen was collected. magister--Latin for "chief" or "master."

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Neovison--from the Greek neos, meaning "new."
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vison--probably from the Swedish word for "weasel."

Nycticeius--Latin for "belonging to the night."

humeralis--Latin for "of the forelimb."

Ochrotomys--from the Greek ochra, meaning "pale yellow," or "gold," and mys, meaning "mouse."

nuttalli--a patronym for Thomas Nuttall, an early American naturalist.

Odocoileus--from the Greek odous, meaning "tooth," and koilos, meaning "hollow," referring to prominent depressions in the molar teeth.

virginianus--Latin for "of Virginia," referring to the place where the type specimen was collected.

Ondatra--Indian name for the muskrat.

zibethicus--Latin for "musky-odored."

Oryctolagus--Greek for "one who digs."

cuniculus--Latin for "rabbit."

Oryzomys--from the Greek oryza, meaning "rice," and mys, meaning "mouse." palustris--Latin for "marshy."

Ovis--Latin for "sheep."

aries--Latin for "ram."

Peromyscus--from the Greek *pero*, meaning "pointed," and *myskos*, meaning "little mouse," probably referring to the shape of the skull.

gossypinus--Latin for "of the cotton."

leucopus--from the Greek leukon, meaning "white," and pous, meaning "foot." polionotus--possibly from the Latin polion, meaning "decorated," and otus, meaning "ear."

Perimyotis--from the Greek peri, meaning "near," mys, meaning "mouse," and otus, meaning "ear."

subflavus--from the Latin sub, meaning "below," and flavus, meaning "yellow," referring to the yellowish belly.

Procyon--Latin for "before dog." The ancestors of dogs were once believed to be raccoons.

lotor--from the Latin *lutor*, meaning "a washer," referring to the raccoon's habit of manipulating its food in water.

Puma--from a Peruvian Indian word.

concolor--Latin for "one color."

yagouaroundi--origin unknown.

Rattus--Latin for "rat."

norvegicus--Latin for "of Norway."

Reithrodontomys--from the Greek reithron, meaning "groove," odous meaning "tooth," and mys, meaning "mouse," thus, "groove-toothed mouse."

humulis--from the Latin humilis, meaning "small."

Scalopus--from the Greek words skalops, meaning "to dig," and pous, meaning "foot," referring to the animals' digging feet.

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aquaticus--Latin for "water dweller." Linnaeus named the animal from a specimen and knew nothing of its habits; he assumed that because it had webbed feet, the mole was aquatic.

Dr Hood, Auburn Univ.

Sciurus--from the Greek words skia, meaning "shadow," and oura, meaning "tail."

carolinensis--Latin for "of Carolina."

niger--Latin for "black."

Sigmodon--from the Greek sigma, the Greek letter "S," and odous, meaning "tooth." This refers to the S-shaped cusp pattern on the last molar.

hispidus--Latin for "rough," referring to the pattern of the fur.

Sorex--Latin for "shrew."

fumeus--Latin for "smoke."

hoyi--a patronym (a name honoring someonerecognizing Philip Hoy, a mammalogist in the mid-1800s

longirostris--Latin for "long snout."

Spilogale--from the Greek spilos, meaning "spot," and gale, meaning "weasel."

putorius--from the Latin putor, meaning "a foul odor."

Sus--Latin for "pig."

scrofa--Latin for "breeding sow."

Sylvilagus--From the Latin sylva, meaning "forest," and the Greek lagos, meaning "hare."

aquaticus--Latin for "water dweller."

floridanus--Latin for "of Florida," referring to the origin of the type specimen.

obscurus--Latin for "obscure," or "indistinct."

palustris--Latin for "marshy."

Tadarida--a coined name.

brasiliensis--Latin for "of Brazil."

Tamias--Greek for "a storer," referring to the food-storing habits of chipmunks.

striatus--Latin for "striped."

Taxidea--from the Greek meaning "to put in order or arrange."

taxus--New Latin meaning "badger."

Trichechus--from the Greek meaning "having hair."

manatus--derived from the Carib word manati, meaning "with breasts." When sailors first saw them, they believed they were mermaids.

Urocyon--from the Greek oura, meaning "tail," and kyon, meaning "dog."

cinereoargenteus--from the Latin cinereus, meaning "ash-colored," and argenteus, meaning "silvery."

Ursus--Latin for "bear."

americanus--Latin for "of America."

Vulpes--Latin for "fox."

Zapus--Greek for "strong feet."

hudsonius--named for Hudson Bay, Canada, where the type specimen was collected.

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