

ANIMAL & PLANT IDENTIFICATION

Note: Questions about Mammalian ID may include any combination of the following: Actual specimens, pictures, skulls, pelts, miscellaneous parts (e.g. antlers, etc.), and tracks

Mammals

- Northern short-tailed shrew
- Star-nosed mole
- Little brown myotis
- Black bear
- Brown bear
- Wolverine
- Fisher
- Pine marten
- River otter
- Mink
- Long-tailed weasel
- Red fox
- Gray fox
- Kit fox
- Arctic fox
- Coyote
- Gray wolf
- Bobcat
- Mountain lion
- Woodchuck
- Yellow-bellied marmot
- Ringtail
- Raccoon
- American badger
- Red squirrel
- Eastern chipmunk
- Eastern gray squirrel
- Eastern fox squirrel
- Southern flying squirrel
- Striped skunk
- Spotted skunk
- Porcupine
- Muskrat
- Nutria
- American beaver
- Virginia opossum
- Eastern cottontail
- Swamp rabbit
- Snowshoe hare
- Black-tailed jackrabbit
- Caribou
- Elk
- Moose
- Pronghorn
- Mule deer
- White-tailed deer (*Includes aging techniques via jawbones: Ages 6mo. – 3½ yrs*)
- Bighorn sheep
- Dall sheep
- Mountain goat
- Bison

Reference Materials

Peterson Field Guide to Mammals of North America

A Field Guide to Animal Skulls

A Field Guide to Animal Tracks

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Aging white-tailed deer:

<http://images.google.com/imgres?imgurl=http://www.huntingmuckalee.com/Images/jawbones/Figure-5-5.jpg&imgrefurl=http://www.huntingmuckalee.com/agingdeer.html&usq=UD64siyNR0hgkp6mnlQadaHEC-U=&h=148&w=361&sz=17&hl=en&start=14&um=1&tbnid=ha4exR5YVK3QnM:&tbnh=50&tbnw=121&prev=/images%3Fq%3Dwhite-tailed%2Bdeer%2Bjawbones%2Baging%2Bchart%26um%3D1%26hl%3Den>

Note: Questions about Fish ID may include any combination of the following: Actual specimens, pictures, miscellaneous parts of specimens (should be obvious), and external anatomy

Fishes

- Black crappie
- White crappie
- Smallmouth bass
- Largemouth bass
- Spotted bass
- Bluegill
- Redear sunfish
- Redbreast sunfish
- Longear sunfish
- Rainbow trout
- Brown trout
- Brook trout
- Walleye
- Sauger
- Saugeye
- Northern pike
- Muskellunge
- Striped bass
- White bass
- Yellow perch
- Atlantic sturgeon
- Bowfin
- Channel catfish
- Blue catfish
- Flathead catfish
- Brown bullhead
- Spotted sea trout
- Red drum
- Flounder
- Common carp
- Grass carp
- Freshwater drum
- Redhorse
- Northern hogsucker

Reference Materials

The Virtual Aquarium of Virginia Tech website: <http://www.cnr.vt.edu/efish/>

Tennessee Wildlife Resources Agency Fish Photo Gallery website:

http://www.tnfish.org/PhotoGalleryFish_TWRA/FishPhotoGallery_TWRA/TWRAFishPhotoGallery.htm

The Fishes of Tennessee textbook, Etnier and Starnes

Or, other field guide for fishes

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

External Anatomy on Website: http://www.ncwildlife.org/pg07_WildlifeSpeciesCon/images/img_7b1b_diagram.gif

Note: Questions about Reptile ID may include any combination of the following: Actual specimens, pictures, and miscellaneous parts of specimens (parts should be obvious)

Reptiles

- American alligator
- American crocodile
- Gopher tortoise
- Alligator snapping turtle
- Common snapping turtle
- Red-eared slider
- Yellowbelly slider
- Smooth softshell
- Eastern box turtle
- Common musk turtle
- Bog turtle
- Common map turtle
- Loggerhead sea turtle
- Leatherback (sea turtle)
- Green anole
- Texas horned lizard
- Fence lizard
- Eastern glass lizard
- Six-lined racerunner
- Broadhead skink
- Rough green snake
- Northern water snake
- Queen snake
- Eastern garter snake
- Southern ringneck snake
- Northern ringneck snake
- Eastern hognose snake
- Coachwhip (snake)
- Black racer
- Black rat snake
- Yellow rat snake
- Gray rat snake
- Corn snake
- Pine snake
- Eastern kingsnake
- Eastern milk snake
- Eastern coral snake
- Scarlet snake
- Scarlet kingsnake
- Rainbow snake
- Copperhead (snake)
- Eastern cottonmouth
- Pigmy rattlesnake
- Eastern diamondback rattlesnake
- Timber rattlesnake

Reference Materials

A Field Guide to Reptiles & Amphibians of Eastern & Central North America (Peterson Field Guide Series)

Reptiles and Amphibians of SC/GA website: <http://www.uga.edu/srelherp/index.htm#Reptiles>

Amphibians and Reptiles of NC website: <http://www.herpsofnc.org/>

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Note: Questions about Amphibian ID may include any combination of the following: Actual specimens, pictures, and frog/toad calls

Amphibians

- Greater siren
- Eastern hellbender
- Ozark hellbender
- Marbled salamander
- Spotted salamander
- Tiger salamander
- Red-spotted newt
- Tennessee cave salamander
- Zigzag salamander
- Northern slimy salamander
- Northern dusky salamander
- Blackbelly salamander
- Shovelnose salamander
- Blue Ridge two-lined salamander
- Three-lined salamander
- Jordan's salamander
- Flatwoods salamander
- Southern toad
- American toad
- Giant toad
- Oak toad
- Eastern spadefoot
- Eastern narrowmouth toad
- Cricket frog (specific enough)
- Gray treefrog
- Green treefrog
- Barking treefrog
- Spring peeper
- Ornate chorus frog
- Upland chorus frog
- Southern leopard frog
- Wood frog
- Pickerel frog
- Green frog
- River frog
- Pig frog
- American bullfrog

Reference Materials

A Field Guide to Reptiles & Amphibians of Eastern & Central North America (Peterson Field Guide Series)

Reptiles and Amphibians of SC/GA website: <http://www.uga.edu/srelherp/index.htm#Reptiles>

Amphibians and Reptiles of NC website: <http://www.herpsfnc.org/>

USGS Online Frog Quiz Website (i.e. "Frog Call Lookup"):

<http://www.pwrc.usgs.gov/frogquiz/index.cfm?fuseaction=main.lookup>

The Calls of Frogs and Toads CD: A NorthWord Nature Guide

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Note: Questions about Bird ID may include any combination of the following: Actual specimens, pictures, waterfowl and upland game bird wings, tails, and/or other parts, and bird songs

Birds

- Tundra swan
- Trumpeter swan
- Canada goose
- Snow goose
- Wood duck
- Mallard
- American black duck
- Gadwall
- Green-winged teal
- American wigeon
- Northern pintail
- Northern shoveler
- Blue-winged teal
- Cinnamon teal
- Canvasback
- Redhead
- Ring-necked duck
- Greater and Lesser scaup
- Common goldeneye
- Bufflehead
- Common merganser
- Red-breasted merganser
- Hooded merganser
- Ruddy duck
- Ring-necked pheasant
- Wild turkey (*Includes sexing techniques via spurs, feathers, and scat; aging techniques via spurs, tail, and/or beard length*)
- Ruffed grouse
- Spruce grouse
- Sage grouse
- Greater and Lesser prairie-chicken
- Northern bobwhite
- Masked bobwhite
- California quail
- Scaled quail
- Red-throated loon
- Common loon
- American white pelican
- Brown pelican
- Green heron
- Little blue heron
- Cattle egret
- Snowy egret
- Great egret
- Great blue heron
- Turkey vulture
- Black vulture
- Osprey
- Mississippi kite
- Swallow-tailed kite
- Northern harrier
- Golden eagle
- American bald eagle
- Cooper's hawk
- Harris's hawk
- Red-shouldered hawk
- Red-tailed hawk
- American kestrel
- Peregrine falcon
- Common snipe
- American woodcock
- Rock dove
- Mourning dove
- Greater roadrunner
- Barn owl
- Great horned owl
- Barred owl
- Spotted owl
- Snowy owl
- Eastern screech owl
- Northern saw-whet owl
- Burrowing owl
- Chuck-will's-widow
- Whip-poor-will
- Blue jay
- American crow
- Common raven

Reference Materials

Patuxent Bird Identification InfoCenter website: <http://www.mbr-pwrc.usgs.gov/id/framlst/>

All About Birds website, Cornell University: www.birds.cornell.edu/AllAboutBirds/BirdGuide/

Field Guide: National Geographic Field Guide to Birds of North America

Or, other field guide to birds

Peterson Field Guide to Bird Songs (Audio CD)

Thayer Birding Software

The LeMaster Method: Waterfowl Identification Guide (inexpensive and excellent for wing I.D., etc.)

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Note: Questions about Plant ID may include any combination of the following: Actual specimens, pictures, obvious plant parts, and herbarium sheets. You will also be asked about the wildlife uses of some of these plants.

Plants

goldenrod

Solidago sp.

- Deer, rabbits, grouse, and turkey occasionally consume the basal rosettes during winter
- Seeds are consumed in minor amounts by songbirds and small mammals
- Attracts late season pollinators

Rubus sp.

dewberry, blackberry, raspberry

- Collectively, the *Rubus* species are the most important group of plants to wildlife in the SE
- Soft mast available from Spring (dewberries) through late summer (blackberry & raspberry) – eaten by many species
- Leaves are an important browse for deer and rabbits
- Blackberry thickets provide some of the very best escape cover

Greenbrier or Catbrier

Smilax sp.

- The fruits (soft mast) are an important late winter - early spring food for grouse, turkey, quail, and songbirds
- Deer and grouse browse the foliage
- Rabbits consume the leaves and young shoots

Smartweed

Polygonum sp.

- Valuable wetland plants
- Browse for deer; Seeds are readily consumed by waterfowl and other wildlife

wild millet or barnyardgrass

Echinochloa crus-galli

- Generally wetland-related
- Seeds readily consumed by waterfowl and other wildlife, particularly birds

jewelweed

- Nectar producer, used by hummingbirds and others

common pokeweed

- Important soft mast during late summer-early fall for many mammals and birds
- The seeds are an important component in the mourning dove diet during fall and winter
- Deer eat the fruit and foliage

Bidens sp.

Spanish needles

- Rarely abundant, but seeds readily consumed by quail and other seed-eating songbirds
- Seeds consumed by wood ducks and dabbling ducks in wetlands

common mullein

- Not much wildlife use reported

Desmodium sp.

Beggar's lice

- One of the most important species in the diet of northern bobwhite
- Seeds consumed during readily by game birds during fall and winter
- High preference white-tailed deer forage

yellow indiagrass

- Indiagrass seeds are consumed by various songbirds
- Excellent nesting and escape cover for quail and other wildlife
- Deer will use it for bedding cover

foxtail grass

- Foxtails are an important seed source for quail, doves, and songbirds
- Giant foxtail (wetland plant) is important for waterfowl for its seeds and source of cover

partridge pea

- Important seed source during winter for quail
- Provides excellent escape and foraging cover
- Larval food plants for several species of butterflies

sedge***Cyperus* sp.**

- Seeds are important waterfowl foods in wetlands
- The underground tubers of Chufa are readily dug up and consumed by turkey, raccoon, and hogs in loose soils

common ragweed

- Ranks among the best seed and cover-producing plants for quail
- Seeds also consumed by mourning dove and other songbirds
- Preferred deer browse during spring and summer

Broomsedge

- Seeds consumed less frequently by quail and more frequently by sparrows and other songbirds
- Likely the most often used species of grass for nesting quail
- Excellent nesting and escape cover

Splitbeard bluestem

- See notes above for broomsedge, but much less abundant

Squawroot or Bear corn

- Parasitic on the roots of oak trees
- Bear food, high in fiber

Smooth sumac

- Fruiting heads available as a winter food source
- Deer, opossum, grouse, turkey, quail, and many songbirds eat the fruit
- Emergency winter forage for rabbits
- Excellent escape cover

Wild strawberry

- Fruits during late spring/ early summer
- Consumed by songbirds
- Leaves are eaten by grouse, deer, rabbits other small mammals

Reference Materials

Forest Plants of the Southeast and Their Wildlife Uses, Miller and Miller

Almost Any Field Guide to Plants of the U.S.

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Note: Questions about invasive species ID may include any combination of the following:

Actual specimens, pictures, leaves, twigs, bark, seed, cones, and herbarium sheets

Invasive Species

- Royal paulownia
- Mimosa
- Chinaberrytree
- Tree-of-heaven
- Autumn olive
- Chinese tallow (“Popcorn tree”)
- Japanese knotweed
- Winged burning bush
- Multiflora rose
- Chinese privet
- Bicolor lespedeza
- Sericea lespedeza
- Japanese honeysuckle
- Kudzu
- English ivy
- Nonnative wisteria
- Oriental bittersweet
- Cogon grass
- Tall fescue
- Chinese silvergrass
- Asian bamboo
- Water hyacinth
- Eurasian watermilfoil
- Hydrilla
- Asian carp
- Northern snakehead
- Zebra mussel

Reference Materials

Nonnative Invasive Plants of Southern Forests Book (U.S. Forest Service publication, also available online)

Online National Invasive Species Information Center: <http://www.invasivespeciesinfo.gov/>

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Note: Questions about Aquatic Invertebrates may include identification using actual specimens and pictures. Also, you will be asked to rank the Orders provided below based on water quality indication by ranking them appropriately (i.e. Most tolerant to Least tolerant)

Aquatic Invertebrates

- Crayfish
- Water striders
- Dragonfly larvae
- Stonefly larvae (Learn the Order: Plecoptera)
- Mayfly larvae (Learn the Order: Ephemeroptera)
- Hellgrammite
- Caddisfly larvae (Learn the Order: Trichoptera)
- Water pennies

Reference Materials

Freshwater Invertebrates Book by Voshell

Various online websites for aquatic invertebrates

Google Images: <http://images.google.com/imghp?hl=en&sa=N&tab=li>

Notes: Study the information about the species listed above in the listed field guides. There will likely be some hands-on questions, but a thorough study session will be provided at the event.