

Plants and Animals of Moss Rock Preserve

(Authored by Ken Wills, Friends of Moss Rock Preserve)

The 349 acre Moss Rock Preserve contains an amazing diversity of natural communities including pine forest, hardwood forest, mixed pine-hardwood forests, open brush-herb habitats, stream habitats and even a few forested wetlands or swamps. The land habitats are characterized by the dominant plants found there whether it be trees or herbs. However, many additional plants and animals can be found in those habitats. The following lists of plants and animals found in Moss Rock Preserve were compiled over several years of casual observation by the Friends of Moss Rock Preserve. Moss Rock contains a surprising amount of biological diversity and species richness including 66 species of trees, 136 species of wildflower and herbs, and 111 species of birds. More survey work will reveal more species in these categories as well as barely surveyed groups such as nonflowering plants, fungi, insects, mammals, reptiles and amphibians. We need experts to help survey all of the various categories. However, what we know so far shows that Moss Rock Preserve is a rich oasis for wild plants and animals in a rapidly developing city. We should continue to cherish and protect Moss Rock for the treasure that it is. The various species lists below include tips on when and where to see some of the plants and animals of Moss Rock. Enjoy exploring the natural history of Moss Rock Preserve and work with the Friends of Moss Rock to help maintain and protect this wonderful area. To be informed on ways to help The Friends of Moss Rock Preserve including plant and animal survey, interpretive walks, and trail maintenance please contact Ken Wills at memonte@aol.com or (205) 823-1641. If you see species in Moss Rock not found on this list inform Ken as well.

TREES

The trees of Moss Rock Preserve reflect the diversity of habitats found in the park. Historically, when natural fires burned through the area many of the south-facing slopes and ridges were mountain longleaf pine forest. Due to cutting and fire suppression that once common habitat is now rare. Moss Rock Preserve still contains some nice stands of longleaf pine, but due to fire suppression, other pines and hardwoods have choked out the understory of these once savanna-like wildflower rich forests. Eventually these longleaf forests will succeed to mixed forests and then hardwood forests without fire. However, a quarter acre area of longleaf pine forest has been recently restored to its historic open condition through understory cutting and raking. The plot is marked with a sign. Directions to this area are included in the next paragraph with the directions to the sandstone glade. More longleaf stands may be restored in the future.

The sandstone glades or sloping outcrops of the park also give you a feel of what the former longleaf forests were like due the rock inhibiting thick tree growth. The glades contain scattered longleaf and other pine species as well as some associated understory hardwood trees like blackjack oak. Sun-loving wildflowers and grasses are interspersed among the trees and rocks as well. However, many of the longleaf pine and other trees on the glades do not reach their normal large size to the fact they literally grow on a rock. The glades also contain plants unique to that habitat. To see an example of one of these open longleaf pine glade habitats follow the trail west and downhill from the boulder field shallow cave passing some giant old longleaf pine mixed with hardwood and then taking a left on the White Trail where you will shortly arrive at a bridge that leads to a branch of the Blue Trail. Follow the Blue Trail up the hill where you will shortly pass by the edge of one of these glades. Please do not walk on the glade without a trained naturalist so as to avoid trampling the area's rare plants. You can continue on the blue trail along a creek with small waterfalls and take the next right fork of the blue trail which is an old road bed will you will pass the longleaf restoration area and some semi-open longleaf stands before that trail runs out.

Another interesting habitat found in the park is mixed pine stands which are now more common than they used to be due to fire suppression. In these stands you can find all four of the pines native to the park as well as red cedar. The Sierra Nevada Mountains are boasted about as one of the most diverse conifer forests in the world because you can find five conifers in one stand. The mountains of Alabama and northwest Georgia can make a similar claim. This habitat is likely to be seen on ridges and upper slopes along the Blue and White trails.

The north-facing slopes such as that found around the boulder field and along the red trail contain upland hardwood forest containing such species as chestnut oak and pignut hickory with an understory of red maple. The areas along Hurricane Branch and other streams passed by the white trail contains cove hardwood forest which contains the greatest number of tree species including white oak, tulip poplar, American beech with an understory of Florida sugar maple, red buckeye, and horse sugar. American sycamore, water oak, and black willow can be found along the side of some of the Preserve's streams. Some small swamps such as frog pond near the western end of the white trail occur in Moss Rock and they are dominated by sweetgum. Mixtures of various pine and hardwoods can be found in transitions between the various pine and hardwood habitats.

To get a good sampling of the preserve's trees follow the white trail from the Simmons Middle School trailhead across the first bridge continuing left or upstream on the white trail to reach the preserve's first Eagle Scout tree identification trail section where many of the aforementioned species are labeled and their unique qualities are described. Visit the Preserve in late March-early May to see flowers of trees such as dogwood, red buckeye and tulip poplar. Visit the Preserve in late October-early November to see the glorious fall colors of the oaks, hickories and maples. Enjoy the Moss Rock's plants but remember that it is against the law to pick or take any plants from within the boundaries of the park. Some of the tree species currently found in Moss Rock Preserve are as follows:

Longleaf Pine; Shortleaf Pine; Loblolly Pine; Virginia Pine; Eastern Red Cedar; Black Willow; Bayberry; Eastern Cottonwood; Pignut Hickory; Mockernut Hickory; Eastern Hophornbeam; American Hornbeam; American Beech; White Oak; Post Oak; Chestnut Oak; Northern Red Oak; Southern Red Oak; Black Oak; Scarlet Oak; Blackjack Oak; Water Oak; Willow Oak; Turkey Oak; Georgia Oak; Cherrybark Oak; Winged Elm; Slippery Elm; Hackberry; Red Mulberry; Southern Magnolia-exotic; Tulip Popular; Pawpaw; Sassafras; Sweetgum; Witch Hazel; American Sycamore; Crab Apple; Alabama Cherry; Allegheny Serviceberry; Cockspur Thorn; Sugar Haw; Parsley-Leafed Haw; Eastern Redbud; Black Locust; Staghorn Sumac; Shining Sumac; Tree of Paradise-exotic; Royal Paulownia-exotic; Mimosa-exotic; American Holly; Chinese Holly-exotic; Florida Sugar Maple; Red Maple; Boxelder; Red Buckeye; Basswood; Flowering Dogwood; Black Tupelo; Sourwood; Tree Sparkleberry; Devil's Walkingstick; Common Persimmon; Carolina Silverbell; Fringetree; White Ash. (66 species)

VINES

The vines of the park add a tropical feel to the forest as some species like cross vine and Virginia Creeper completely cover tree trunks and other species like muscadine grape and supplejack grow to giant proportions in an octopus like manner. Native vines such as those mentioned above rarely do serious damage to the trees and provide valuable wildlife foods and habitats. In contrast, wisteria, Japanese honeysuckle and kudzu are exotic and have no natural predators. They smother trees and natural habitats. These species will need to be controlled to protect the diverse habitats of the park in the long-term. Mid March through mid April is the best time to see the blooming vines such as Yellow Jasmine and Crossvine. These vines can best be viewed in the trees and bushes facing open areas of the Preserve such as the power line trail. Enjoy Moss Rock's plants, but remember that it is against the law to pick or take any plants from within the boundaries of the park. Some of the vine species currently found in Moss Rock Preserve are as follows:

Sweet-Scented Smilax; Common Greenbriar; Bamboo Vine; Coral Honeysuckle; Japanese Honeysuckle-exotic; Wisteria-exotic; Kudzu-exotic; Supple Jack; Virginia Creeper; Poison Ivy; Muscadine Grape; Summer Grape; Bailey's Grape; Yellow Jasmine; Crossvine; Trumpet Creeper; Climbing Hydrangea; Blackberry; Dewberry; Partridge Berry; Virginia Snakeroot; Virgin's Bower; Climbing Bonaset; Hairy Pipe Vine; Cypress Vine-exotic; Mistletoe-not a vine but best category to place it in. (26 Species)

SHRUBS

Shrubs provide some of the best flower displays in Moss Rock. Follow the white trail east from the boulder field during the month of May and you will see lots of blooming mountain laurel and the state wildflower Oak Leaf Hydrangea. Visit the old road section of the blue trail in early Fall to see the exotic colored berries of beautyberry and heart a busting, but both are poisonous to eat so please do not try them. The evergreen privet is an exotic that is taking over the understory in large areas of Moss Rock and it will need to be controlled to protect the natural habitats of the park in the long-term. Enjoy Moss Rock's plants, but remember that it's against the law to pick or remove any plants from within the boundaries of the park. Some of the shrubs species currently found in Moss Rock Preserve are as follows:

Sweet Shrub; Yellow Root; Oak Leaf Hydrangea; Mountain Indigo; Privet-exotic; Heart A Busting; Honeysuckle Azalea; Mountain Laurel; Huckleberry; Elliot's blueberry; Elderberry; Beautyberry; Alder; Fragrant Sumac; Yaupon Holly. (15 Species)

WILDFLOWERS AND OTHER HERBS

The various habitats of Moss Rock contain a great diversity of wildflowers and other herbs. Visit the cove hardwood along the western white trail in late March early April to see dwarf crested iris, bellwort, liverleaf, and May apple. The sandstone glades contain lots of spiderwort in the late March through early April, as well as some birdfoot violets, but the glades' main glories can be seen in September when the blazing star and rare Nuttall's rayless goldenrod blooms. This type of sandstone glade is known as a Fort Payne Sandstone Glade, and they are only found in northeast Alabama. They contain many rare species and are the most unique habitat in Moss Rock Preserve. We must make sure they are preserved for the long-term. To see an example of one of these glade habitats follow the trail west and downhill from the boulder field shallow cave passing some giant old longleaf pine mixed with hardwood and then taking a left on the White Trail where you will shortly arrive at a bridge that leads to a branch of the Blue Trail. Follow the Blue Trail up the hill where you will shortly pass by the edge of one of these glades. Please do not walk on the glade without a trained naturalist so as to avoid trampling the areas rare plants. The power line Trail and corridor as well as some of the preserve's other open habitats contains many of the plants that have been pushed out of the old longleaf pine habitats due to fire suppression. A walk along the power line in the summer will reveal various asters and sunflowers, and a similar walk in September will reveal various goldenrods and the butterflies that come there to enjoy them. Enjoy Moss Rock's plants, but remember that it is against the law to pick or take any plants from within the boundaries of the park. Some of the wildflower and other herb species currently found in Moss Rock Preserve are as follows:

Dayflower; Virginia Spiderwort; Hairy Spiderwort; Featherbells; Fairy Wand; Spider Lilly; Trillium; Indian Cucumber Root; Solomon's Seal; False Solomon's Seal; Elephant Ear-exotic; Grape Hyacinth; exotic; Trout Lilly; Bellwort; False Garlic; Yellow Star Grass; Blue-eyed Grass; Dwarf Crested Iris; Southern Twayblade; Puttyroot Orchid; Bear Grass Yucca; Wild Ginger; Heartleaf; Menge's Fame Flower; Square Flower; Pink Catchfly; Buttercup; Doll's-Eyes; Windflower or Rue Anemone; Liverleaf or Hepatica; Wood Anemone; May Apple; Foamflower; Cinquefoil; Sensitive Briar; Partridge Pea; Crimson Clover-exotic; White Clover-exotic; Pink Clover-exotic; Mustard Clover; Goat's-Rue; White Vetch; Violet Wood Sorrel; Yellow Wood Sorrel; Butterfly Pea; Spurred Butterfly Pea; Wild Geranium; Allegheny Spurge; Jewelweed; Spurge Nettle; Pinweed; Birdfoot Violet; Common Blue Violet; Halbert-Leaved Violet; Passion Flower; Prickly Pear Cactus; Evening Primrose; Rattlesnake Master; Queen Anne's Lace-exotic; Spotted Wintergreen; Indian Pink; Sampson's Snakeroot; Blue Star; Butterfly Weed; Whorled Milkweed; Sand Milkweed; Flowering Spurge; Wild Potato Vine; Field Bindweed; Common Mourning Glory-exotic; Ivyleaf Mourning Glory; Downy Phlox; Carolina Phlox; Hairy Phlox; Common Plantain; Stiff Verbena; Brazilian Verbena-exotic; Skullcap; Mountain Mint; Bird's-Eye; Common Mullein-exotic; Hairy Penstemon; Lousewort; Beechdrops; Bluet; Venus Looking; Glass; Beggarweed; Cardinal Flower; Purple Lobelia; Dwarf Dandelion; Red-Seeded; Dandelion-exotic; Two Color Thistle; Blazing Star or Liatris; Sweet Joe-Pye Weed; Dog Fennel; Bonset; Ironweed; White Snakeroot; Daisy Fleabane; New England Aster; Common Goldenrod; Nuttall's Rayless Goldenrod; Sharp toothed Goldenrod; Silverrod; Ragweed; Rosinweed; Black-eyed

Susan; Narrow-leaved Sunflower; Eared Coreopsis; Whorled Tickseed; Large Flowered Tickseed; Bitterweed; Yarrow; Oxeye Daisy; Golden Ragwort; Wild Strawberry; Pokeweed; Knotweed; Lantana-exotic; Johnson Grass-exotic; Needlerush; Bulrush; Cattail; Arrowhead; Smartweed; Horehound-exotic; Monkey grass-exotic; Chufa; Porcupine Sedge; Switch cane or Small Native Bamboo; Tall Redtop; River Oats; Broomsedge Grass; Little Bluestem Grass; Split Beard Bluestem; Bristlegrass. (136 Species)

FERNS AND OTHER NON WOODY, NON FLOWERING PLANTS AND FUNGI

This category of simple plants has not been thoroughly researched; however it rates some discussion considering the name of the park. The boulders of Moss Rock Preserve, including those of the boulder field, have some moss on them. However, most of what people think is moss covering the rocks is really liverworts. Resurrection fern, which resurrects from a brown state after rain also covers huge areas of the boulders. Moss Rock Preserve might be more appropriately named Liverwort Rock Preserve or Fern Rock Preserve although the former would not sound too appealing to many. The boulders and sandstone glades (sloping pavements of rock) contain a lot of lichens such as Reindeer Moss. Lichen is algae and fungi living in a relationship where the algae produces food for itself and the fungi, and the fungi breaks down substances into nutrients for both. These glades have harsh growing conditions that favor both desert plants like cactus and tundra plants like lichens. To see an example of one of these glade habitats and its lichens follow the trail west and downhill from the boulder field shallow cave passing some giant old longleaf pine mixed with hardwood and then taking a left on the white trail where you will shortly arrive at a bridge that leads to a branch of the blue trail. Follow the blue trail up the hill where you will shortly pass by the edge of one of these glades. Please do not walk on the glade without a trained naturalist so as to avoid trampling the areas of rare plants. The rest of the park has an abundance of easy to see ferns. Resurrection fern is the most common fern found along the creek on the White Trail of Moss Rock while Bracken Fern is the common fern in drier forests of pine and mixed forests along the blue trail. Bracket Fungi can be found on decaying snags and logs throughout the park. **Enjoy the Moss Rock's plants, but remember that it is against the law to pick or take any plants from within the boundaries of the park.** Some of the ferns and other non woody, non flowering plants and fungi species currently found in Moss Rock Preserve are as follows:

*Resurrection Fern; Christmas Fern; Cinnamon Fern; Royal Fern; New York Fern; Sensitive Fern; Bracken Fern; Ebony Spleenwort; Hairy Lip Fern; Virginia Chain Fern; Net Veined Chain Fern; Southern Lady Fern; Pin Cushion Moss; Liverworts; Algae; Gold Cobblestone Lichen; Surprise Lichen; Brick-Spored Firedot Lichen; Sunken Button Lichen; Common Button Lichen; Gold Dust Lichen; Reindeer Lichen; Dixie Reindeer Lichen; Dixie Soldier Lichen; Trumpet Lichen; Peg Lichen; Script Lichen; Fluffy Dust Lichen; Jellyskin Lichen; Ruffle Lichen; Wart Lichen; Rosette Lichen; Smoky-Eye; Boulder Lichen; Rough Speckled Shield Lichen; Bark Rash Lichen; Frosted Grain Spore Lichen; Rock Shield Lichen; Old Man's Beard; Mushrooms; Bracket Fungi; Puffballs; Jelly Fungi; Black Knot Fungus. **Note: This category has not been sufficiently researched to provide a preliminary number.***

MAMMALS

Most mammals in Moss Rock Preserve move around at night, and that is one of difficulties in documenting the species. A visitor will likely see squirrels and chipmunks in the forest and cottontail rabbits in the shrubby power line corridor. Occasionally, you will see a woodchuck around the power line corridor, and deer are sporadically seen throughout the preserve. If you are really lucky you may see a fox out in the daytime. Tracks of various mammals can be seen in wet mud or sand along streams as well. Some of the mammal species currently found in Moss Rock Preserve are as follows:

*Shrew; Eastern Mole; Little Brown Bat; Nine-banded Armadillo; Eastern Cottontail Rabbit; Woodchuck; Eastern Gray Squirrel; Eastern Chipmunk; Woodland Vole; Coyote; Gray Fox; Red Fox; Raccoon; Striped Skunk; White-tailed Deer. **Note: This category had not been sufficiently researched to provide a preliminary number.***

BIRDS

Moss Rock Preserve provides one of the last significant blocks of natural habitat in rapidly growing metro Birmingham, and it is home to many birds associated with upland habitats. 108 species of birds have been observed in the preserve. The shrubby-grassy power line trail corridor provides habitat and viewing opportunities for bird species associated with longleaf pine savannas prior to fire suppression. The group of birds found here includes summer breeders such as the indigo bunting, yellow-breasted chat, and white eyed vireo as well as white throated and song sparrows in winter. Spring and fall season migrants in this habitat include prairie warblers and yellowthroats. Most of these edge-scrub-adapted birds have been fortunate to have had man created shrubby habitats created as the longleaf savannas declined.

Unfortunately, another group of birds which depend on mature forest have been steadily losing habitat in many areas especially around Birmingham. Moss Rock provides critical mature forest habitat for breeding summer residents such as the hooded warbler, Kentucky warbler, Louisiana waterthrush, red eyed vireo, summer tanager, wood thrush and the broadwinged hawk. Moss Rock also provides critical mature forest habitat for migrating birds such as the Magnolia Warbler, American Redstart, Blackthroated Green Warbler, Solitary Vireo and Swainson's Thrush. Moss Rock also provides important mature forest habitat for year-round and winter residents including the pileated woodpecker, barred owl, red shouldered hawks, winter wren, and kinglets. The White Trail following Hurricane Branch and its tributaries and is a great place to look for birds associated with mature forest especially around Tunnel Falls. Mature forests with lots of pines such as those found along the eastern portion of the blue trail are good places to look for mature pine dependent species such as the brownheaded nuthatch and the pine warbler. When looking for birds in Moss Rock any time of year explore both the shrubby power line corridor and mature forest habitats so that you will get to enjoy the full range of birdlife found in the Preserve. Consult the species list below to see what has been observed in Moss Rock Preserve and the season of occurrence for which a key is provided immediately below.

Season of Occurrence

PR-Permanent Resident-Breeds in Moss Rock Preserve

SR-Summer Resident-Breeds in Moss Rock Preserve-Likely to be seen Spring to Fall

WR-Winter Resident-Likely to be seen Fall to Spring

M-Migrant –Passes through Moss Rock in Fall and Spring

T-Transient-Sporadically Passes through or over Moss Rock

Great Blue Heron-T; Canada Goose-T; Black Vulture-T; Turkey Vulture-T; Sharp-shinned Hawk-T; Cooper Hawk-T; Red Shouldered Hawk-PR; Red-tailed Hawk-T; Broad-winged Hawk-SR; Turkey-T; Sora-M; Killdeer-PR; Mourning Dove-PR; Yellow-billed Cuckoo-M; Eastern Screech Owl-T; Great Horned Owl-T; Barred Owl-PR; Common Nighthawk-SR; Whip-poor-will-M; Chimney Swift-SR; Ruby-throated Hummingbird-SR; Belted Kingfisher-T; Red-headed Woodpecker-T; Red-bellied Woodpecker-PR; Yellow-bellied Sapsucker-WR; Downy Woodpecker-PR; Hairy Woodpecker-T; Northern Flicker-T; Pileated Woodpecker-PR; Olive-sided Flycatcher-M; Yellow-bellied Flycatcher-M; Willow Flycatcher-M; Eastern Wood Peewee-M; Eastern Phoebe-PR; Great Crested Flycatcher-SR; Eastern Kingbird-T; Purple Martin-T; Rough-winged Swallow-M; Blue Jay-PR; American Crow-PR; Carolina Chickadee-PR; Tufted Titmouse-PR; Red-breasted Nuthatch-T; White-breasted Nuthatch-PR; Brown-headed Nuthatch-PR; Carolina Wren-PR; Winter Wren-WR; Golden-crowned Kinglet-WR; Ruby-crowned Kinglet-WR; Blue-gray Gnatcatcher-SR; Eastern Bluebird-PR; Veery-M; Gray-cheeked Thrush-M; Swainson's Thrush-M; Hermit Thrush-WR; Wood Thrush-SR; American Robin-PR; Catbird-SR; Mockingbird-PR; Brown Thrasher-PR; Cedar Waxwing-WR; Starling-PR-exotic; White-eyed Vireo-SR; Blue-headed Vireo-M; Yellow-throated Vireo-M; Red-eyed Vireo-SR; Golden-winged Warbler-M; Tennessee Warbler-M; Orange-crowned Warbler-M; Yellow Warbler-M; Chestnut-sided Warbler-M; Magnolia Warbler-M; Cape May Warbler-M; Black Throated Blue Warbler-M; Yellow-rumped Warbler-WR; Black-throated Green Warbler-M; Blackburnian Warbler-M; Pine Warbler-PR; Prairie Warbler-M; Palm Warbler-M; Bay-breasted Warbler-M; Blackpoll Warbler-M; Black-and-White Warbler-M; American Redstart-M; Ovenbird-M; Northern Waterthrush-M; Louisiana Waterthrush-SR; Kentucky Warbler-SR; Common Yellowthroat-M; Hooded Warbler-SR; Canada Warbler-M; Yellow-throated Warbler-T; Yellow-breasted Chat-SR; Summer Tanager-SR; Scarlet Tanager-M; Cardinal-PR; Blue

Grosbeak-M; Indigo Bunting-SR; Rufous-sided Towhee-PR; Chipping Sparrow-PR; Field Sparrow-PR; Song Sparrow-WR; White-throated Sparrow-WR; Dark-eyed Junco-WR; Red-winged Blackbird-T; Common Grackle-T; Brown-headed Cowbird-PR; Purple Finch-T; House Finch-PR-exotic; American Goldfinch-PR; House Sparrow-PR-exotic. (111 Species)

Sightings of species in the Moss Rock area which due to species rarity and limited observation time need more conformation: Bald Eagle-immature; Vermilion Flycatcher; Philadelphia Vireo; Connecticut Warbler; American Tree Sparrow.

REPTILES AND AMPHIBIANS

This category has not been adequately researched due to the nature of most salamanders and snakes to stay hidden. Visitors in the late winter and early spring will hear the calls of Spring Peepers and Chorus Frogs at the parks limited wetlands such as the appropriately named Frog Pond on the western end of the White Trail. The commonly seen lizards of Moss Rock are the five-lined skink and the green anole or false chameleon that can change its color from brown to green. Snakes are rarely seen in Moss Rock due to their being mainly active at night, but the one most likely to be encountered is the harmless black rat snake. The box turtle is occasionally seen in Moss Rock. This little turtle can live to be 100 years old. **Remember that Moss Rock is a nature preserve so show all its creatures respect. Do not take tadpoles, frogs, salamanders or any other living things from it. Leave them so the species will continue to be found in Moss Rock and so that others can enjoy them too.**

Gray Tree Frog; Green Tree Frog; Toad ; Spring Peeper; Chorus Frog; Dusky Salamander; Two Lined Salamander; Slimy Salamander; Green Anole or False Chameleon ; Five Lined Skink; Mole Skink; Eastern Fence Lizard; Worm Snake; Brown Snake; Rat Snake ; Eastern Kingsnake; Copperhead; Timber Rattler; Banded Water Snake; Box Turtle; Snapping Turtle. Note: This category had not been sufficiently researched to provide a preliminary number.

FISH

The fish of Moss Rock Preserve have not been adequately surveyed, but shiners are the most common species. Bass and Sunfish can be found in larger pools. **Remember that Moss Rock is a nature preserve so show all its creatures respect. Do not take minnows or any other living things from it. Leave them so the species will continue to be found in Moss Rock and so that others can enjoy them too.**

Alabama Hogsucker; Pretty Shiner; Mosquito Fish; Green Sunfish; Largemouth Bass; Darter. Note: This category had not been sufficiently researched to provide a preliminary number.

INSECTS AND OTHER INVERTEBRATE ANIMALS

Moss Rock Preserve contains a great number of insect species, which has not been adequately surveyed. The larger showier butterflies are the most obvious. Black, Yellow and Zebra Swallowtails can be found in the forest even up into the treetops, while Monarchs and Fritillaries are most likely seen among the goldenrods along the power line during Fall migration. The Annual cicada produces the buzz in the trees that you hear during a hot summer day. Brilliantly colored dragonflies and damselflies are found along the park's creeks. The dragonflies sit with their wings down along their sides and damselflies sit with their wings held erect above them. If you are walking along and see what looks like spit on a plant, it is most likely the foam produced by the spittlebug to protect its growing young. If you see a twig walking it is just the walkingstick that camouflages itself as a twig to avoid being eaten. While the park has interesting native ants the exotic fire ant is to be avoided because of its painful sting. This species has helped to cause the decline of many native frogs, lizards and ground nesting birds, and controlling it in the park would be beneficial to those species. Other invertebrates include the water strider that can be seen skating along

pools of the Preserve's streams. It is adapted so as to not break the surface tension of the water and thus not sink. Freshwater snails a sign of good water quality can be seen on some of the rocks of the streams as well. **Remember that Moss Rock is a nature preserve so show all its creatures respect. Do not take butterflies, bugs, crayfish, or any other living things from it. Leave them so the species will continue to be found in Moss Rock and so that others can enjoy them too.**

*Monarch Butterfly; Buckeye Butterfly; Fritillary Butterfly; Red-spotted Purple Butterfly; Blues Butterfly; Snout Butterflies; Sulfur Butterfly; Black Swallowtail Butterfly; Tiger Swallowtail Butterfly; Zebra Swallowtail Butterfly; Skipper Butterfly; Luna Moth; Cecropia Moth; Clear Winged Sphinx Moth; White Lined Sphinx Moth; Tent Caterpillar Moths; Candle Moths; Honey Locust Moth; American Cockroach; Click Beetles; Fireflies or Lightning Bugs; Ladybugs; Tiger Beetles; Weevils; Unicorn Beetle; Weevils; Caterpillar Hunter; Fire Ant-exotic; Argentine Ant-exotic; Carpenter Ant; Little Black Ant; Bumble Bee; Yellowjacket; Honeybee-exotic; Paper Wasps; Gall Wasps; Dirt Dauber; Crane fly; Mosquito; Robber Fly; House Cricket; Camel Cricket; Katydid; Walkingstick; Praying Mantids; Short-Horned Grasshoppers; Assassin Bugs; Leafhoppers; Annual Cicada; Spittlebug; Milkweed Bug; Dragonflies; Damselflies; Stonefly; Ant Lion or Doodlebug; Bee Fly; Tick; Daddy Longlegs; Jumping Spiders; Orb Weaver Spiders; Funnel Web Spiders; Black Widow Spider; Millipedes; Scorpions; Earthworms; Water Strider; Ripple Bug; Crayfish; Freshwater Snails; Slugs; Land Snails. **Note: This category had not been sufficiently researched to provide a preliminary number.***

TO BE CONTINUED...