

## MObugs -- The Life and Times of Missouri Insects

### Surprises in the Woods

After a very long, dreary, cold winter, there is nothing I look forward to more than the arrival of spring. For me, a self proclaimed hater of cold weather, it seems as if it will never be warm again. I suffer the winter, not in silence, but by grumbling often-unintelligible things about the "Blasted cold weather".

Finally, spring has sprung and with it all the flowers, frogs, those elusive mushrooms and the INSECTS! I look forward to each day much like a kid looks forward to a trip to the amusement park. For me nature is my amusement park. Each new species or sight for me is as exhilarating as that plunge at 60 mph down a frightening hill on a roller coaster.



One recent day it had rained all morning, then the sun came out after lunch, bringing with it 84 degree temperatures. It was perfect mushroom weather. I suggested to my husband we head to the timber to search for these tasty treats. He grumbled a bit about being tired, but agreed to go. Seems he is a winter person. Warm weather for him equals too much work and not enough time. Well anyway, after a little coercion we headed to the timber. I drove, listening to him mumble: we won't find any mushroom; it is too early, the weather has been too cold, etc... I just smiled.

We pulled up to a spot where we always find them, turned off the car and I spotted a gorgeous butterfly resting on a stick near the fence where we needed to cross. I yelled for my husband to "DON'T MOVE!" I'm sure his first thought was "Where is the snake?" I pointed to the butterfly and told him I needed a picture of it. He just rolled his eyes, but he didn't move, not one inch. He is such a good sport. I quietly walked towards the butterfly, focusing and snapping photos with each step. I had no idea how close I could get to this lovely butterfly and I wanted to make sure to have one picture at least. Fortunately for me, luck was on my side and I was able to get within one foot of this beauty. I knew it was one of three species of butterflies that calls Missouri home. It was either the Question Mark, Eastern Comma, or the Gray Comma. After I took numerous pictures, the butterfly eventually tired of the photo shoot and flew away. We climbed the fence and proceeded to do what we came to do and that was hunt mushrooms. I am proud to say I found the first one of the season! First time that has ever happened. We ended up finding 32 in all. I promised my husband a mushroom fry for supper that night for going with me.



I had trouble identifying the butterfly, so I emailed a friend who is a butterfly expert. I thought it was the Eastern Comma, but wasn't 100% sure. She confirmed that it was indeed an Eastern Comma (*Polygonia comma*). This particular one is the winter form of that species. These are somewhat small butterflies with around 1 ½ -2 inch wingspan, that will be found near timber or wetland areas. I was so excited by this news. I had been trying unsuccessfully for 2 years to get a photograph of this species. They are difficult subjects; they rarely sit still long enough. The Eastern Comma has two broods per year in Missouri, the adults overwinter. In the spring they come out of hiding and look for mates. After mating, the female will lay eggs singly on the leaves of elm or nettles. The young hatch and feed on the leaves. Older caterpillars will create little nests out of rolled leaves and silk in which to spend the daytime hours. They come out in the evening and at night to feed. After a few weeks they will form a pupa and remain this way for a couple of weeks then the adults emerge. This new batch of Commas will be the summer form; they will have almost all black hindwings. Late in the summer, these adults will mate and new caterpillars will munch away on leaves. The adults that hatch from these caterpillars will be the winter form. These are like the one pictured, orange with spotting on the hindwings.

They get their name from a white or silvery colored comma shape on the underside of the hindwing. (Their cousin, the Question Mark butterfly, has a question mark on the underwing.) Eastern Comma butterflies do not nectar at flowers: they prefer sap flows, rotting fruit, and fluids from sandy soils.

Three days later, we returned to woods to look for more mushrooms. We found a few small ones, but nothing too exciting, until I decided to check a spot in the timber we had never searched before. This new location brought with it some huge mushrooms. The biggest I'd ever found. Many were over 5 inches tall. I spotted two large mushrooms right together and informed my husband I'd found two more.

Upon closer inspection, the mushrooms weren't the only thing I'd found. There were at least two inches of one mushroom completely eaten away. Within this hole, something was moving! I waited anxiously to see what would appear and a small dung beetle appeared. He had been chomping away at this mushroom and was residing down inside the stem for safety. Crafty little critter I must say. I watched him for a few minutes then remembered I had my camera. I snapped a picture of a Splendid Earth Boring Beetle (*Geotrupes splendidus*). This is a rather small beetle, approximately 1/2-3/4 inch in size. The color is what is so spectacular about this species -- purple, green, blue, bronze or black, and always iridescent. They appear to shine in the sunlight. Like a June bug, they have very spiny legs; the spines act like shovels. The adults dig underground chambers, and each chamber will have cells branching off. Within each cell, the beetles place cow dung or leaf litter. The female then lays eggs -- one on each pile of poo. The young grubs feed on the dung. Since each cell contains more dung than the beetle can consume, the leftovers are fertilizer for plants and the soil. Therefore, these beetles are quite beneficial. The adults consume dung, decaying vegetation, and fungi (like the morel mushroom). These beetles live in the deciduous hardwood forest where they roam around on the ground under leaf litter and decaying vegetation. They also live in cow lots where they dig their brood chambers underneath piles of dung, and feed on the cow poo. These are among my favorite dung beetles, not just for the service they provide, but for their spectacular coloring.



inch long. Its coloring was very cryptic, almost like moss or lichen. I am certain I would have never spotted him, if he had not moved.

Within minutes of spotting the grasshopper, I noticed a butterfly fluttering across our cornfield. I watched to see in what direction it headed and followed. It came to a stop near the timber edge and rested on the ground. I walked towards it, only to have it fly away again. This went on for 20 frustrating minutes before I could finally get close enough to identify it. It was the Goatweed Leafwing (*Anaea andria*) -- another gorgeous orange butterfly. Their color is almost a burnt orange. These butterflies are very fast fliers with an erratic flight pattern. I watched as this butterfly located its mate. The pair spiraled into the sky very rapidly, then fell back to the ground, separated, and located each other again and repeated the process. I never actually witnessed them mating, appears they were a bit shy with prying eyes around. They are not frequently seen; this has nothing



to do with their population (which is stable) and everything to do with their terrific camouflage. When at rest, with its wings folded, this butterfly look so much like a dead leaf it would be next to impossible to see it, if you weren't already aware it was there. This particular butterfly proved to be a recalcitrant subject so the pictures were not the best, but I was still pleased to even attempt a photo of these elusive butterflies. They are found near mixed hardwood forests and scrubby areas and near streams and roadsides. The adults will sip sap from sap flows, and feed on dung, bird droppings and rotting fruit. The caterpillar host plants are Texas Croton, Prairie Tea and other plants in the Spurge Family.

It just goes to show, that when you are outside among nature, if you leave the modern world behind, and open your mind and your eyes to what is around you, there are many adventures and interesting things to see. Get out and explore; see what you can discover.