

I was in the forest near the garden, and it was in biology when we were tasked with this assignment. The date was October 16th, 2024. The first time I stepped in the area, nothing really stuck out to me. Something changed when I started to actually listen and focus, I noticed a difference in what I witnessed and heard. My senses were somehow heightened almost. My surroundings weren't too lush, which is surprising for a forest but the area still had trees and plants here and there, and I also can't forget insects.

I observed many things with each sense, but I'm going to go into the things that stuck out to me the most. With my vision, I saw a normal forest with nothing really sticking out, but then I started to not take the whole forest in at once. I would observe organisms and objects individually, what really caught my eye was how much life there really was, like seriously there was so much stuff crawling on me and biting me. The life I saw was mainly fire ants, and the species the ground beetle (it's the black small beetle that you usually see a lot in Austin. Since I don't particularly like bugs, I didn't pick it up but I did observe it very closely and its actions. The bugs shell looked very smooth

I thought my observation was intriguing mainly due to the fact that I always saw the ground beetle near my house, around the school, basically anywhere near a forest. I found out that many of them come to your house looking for shelter, (mainly because of moisture which is for a lot of bugs) Another reason you usually see them around your house or just a building is because of light. This quote from [Orkin.com](https://www.orkin.com) will go more into detail

"Light attracts ground beetles to homes." The pests often crawl inside through cracks and gaps in foundations, though open doors or windows also provide entry. Since the insects prefer to live outside, homeowners will find most ground beetles in hiding places under: Accumulated debris."(Why you see Ground Beetles near your home Feb 2025)

I still wanted to understand more on why they are attracted to light, especially light from houses, (artificial light). What I found out is artificial light mimics natural light such as the moon and something I came across while looking on [Frontiersin.com](https://www.frontiersin.com) was that the african dung beetle uses the milky way's natural light (the moon, stars, etc) to maintain their route at night. Natural light is crucial for their survival and not much difference for the ground beetles here in Texas. Many ask how do I stop ground beetles from entering my home but also not interfering with their natural cycle? I looked into how to minimize this problem and using yellow light bulbs has been the most effective.

For an experiment, I would use yellow light bulbs for a month and regular light bulbs for a month. (I can't get the most accurate result for other reasons like weather and temperature but I can run multiple tests maybe for less time). And see how much ground beetles will be coming into my house or at least right outside my house. I will assume that the yellow light bulbs will minimize how much ground beetles will be in or near my house. To see if light is the true aspect that attracts beetles to houses, I could contact Orkin to know if bugs attract more in the summer when it's sunny or more in the fall and winter when artificial light is more present. My observation makes me wonder how we can fully minimize interfering with beetles and their natural behavior and maybe switching to a more natural way of light for our homes.