Arthropod Diversity in Golf Courses and Preserves

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The purpose for this project was to discover whether golf courses or nearby preserves had greater arthropod diversities within their leaf litter. I hypothesized the leaf litter from the preserves would contain a more diverse population of arthropods because that there is less soil pollution in preserves. I then collected my data and used Berlese funnels to preserve these arthropods. Once preserved, I identified the arthropods. After analyzing my data, my results showed that my hypothesis was not supported. Based on my findings I was able to draw the conclusion that the golf courses had greater arthropod diversity. After looking through my results I was amazed, so I decided to further research all of the arthropods found on the golf courses I had taken samples from. After doing some research I realized I was not just dealing with a comparison of arthropod diversities in leaf litter, but another major part of my project were the arthropods I was finding on the golf courses. Some of these arthropods were either known for their destruction of plant roots, their habit of infesting houses, or giving blisters. This was a key piece of my work so I drew another conclusion, this time concerning the species of arthropods found. Even though golf courses have greater arthropod diversity, the diverse animals may be harmful to the location’s ecosystem. This project shows that there is not necessarily an issue with golf courses killing off arthropods, but that the issue is the arthropods golf courses contain.

Awards Won: