The Effect of Light on Fireflies

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Fireflies help our environment stay balanced and with vanishing populations, it is becoming a more important cause to keep them reproducing. With the increasing spread of light pollution, they are unable to communicate in their prime hours to mate. This project looks at the effect of light pollution on the number of firefly flashes in a field environment. There are both Photinus pyralis and Photuris versicolor species present. Eight plots with the dimensions of six meters by six meters are numbered and arranged into four groups consisting of an “unlit” plot and a “lit” plot per group. One minute trials are conducted to count the number of flashes from both species to see the effect of light pollution on the fireflies. Using this research, it is determined that there was a significant difference in the number of flashes between the “lit” and “unlit” plots. There is no significant difference in the number of flashes per timed interval. Keywords: firefly, light pollution, Photinus pyralis, Photinus versicolor

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