

Nathaniel Vercammen

*How Flatworms Are Affected by Magnetic Fields*

This experiment identifies how different magnetic strengths affect reproduction and healing in flatworms. The goal of this project is to identify if magnetic fields speed up healing or slow it down. I also monitored how reproduction rates were affected by the different magnetic field strengths. If healing time is reduced, we can then understand how we could apply this knowledge it to human healing. If reproduction is affected, we may be able to help families that are struggling with having children. Flatworms are soft bodied invertebrates that can be cut in half and regenerate as long as their head is not injured. By monitoring the healing process after a flatworm is cut in half, I was able to show that magnets speed up healing, but too much exposure over long periods of time can slow down the healing cycle. A medium level magnetic field (5 MgOe) increased reproduction the most. Extremely strong magnetic field exposure (48 MgOe) does not help with the reproduction of flatworms but is the best environment for healing.