

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

Amanda M. McDowell

Project Number **S1914**

Project Title Rolly-Pollies Finding Their Way Home

Abstract

Objectives/Goals I wanted to learn the survivablity and adaptive behavior of the isopod Armadillidium vulgare. Ultimately, I wanted to know what would happen to these bugs if they were displaced from their main living area under rocks or brush.

Methods/Materials

To test the survivability and adaptive strength, I displaced 120 pill bugs away from their initial location, under a pile of rocks. I had 10 groups of twenty, and each group was put and "x" amount of feet away. My Group A was left in the initial location. Group B was put 1 ft. away around the pile of rocks. Group C was put 2 ft. away; Group D was put 3 ft.; Group E was put 4 ft.; lastly, Group F was put 5 ft. After ta three days I started my tests. I counted the isopods found in the initial location everyday for ten days

Results

I found the average number of isopods in each group. Group A consistently had about 18 bugs every time I counted. Group B had about 17; Group C had a about 14; Group D had about 12; Group E had about 9; lastly, Group F had about 6 evertime I counted. After doing a statistical analysis of my data, it showed that there is a significant difference between the groups.

Conclusions/Discussion

In conclusion, isopods can survive the journey back home if they were placed up to a maximum of two feet. After two feet, they are lost and their chances of making it back home are slim.

Summary Statement

I testested the survivability and behavior of the isopods Armadillidium vulgare.

Help Received