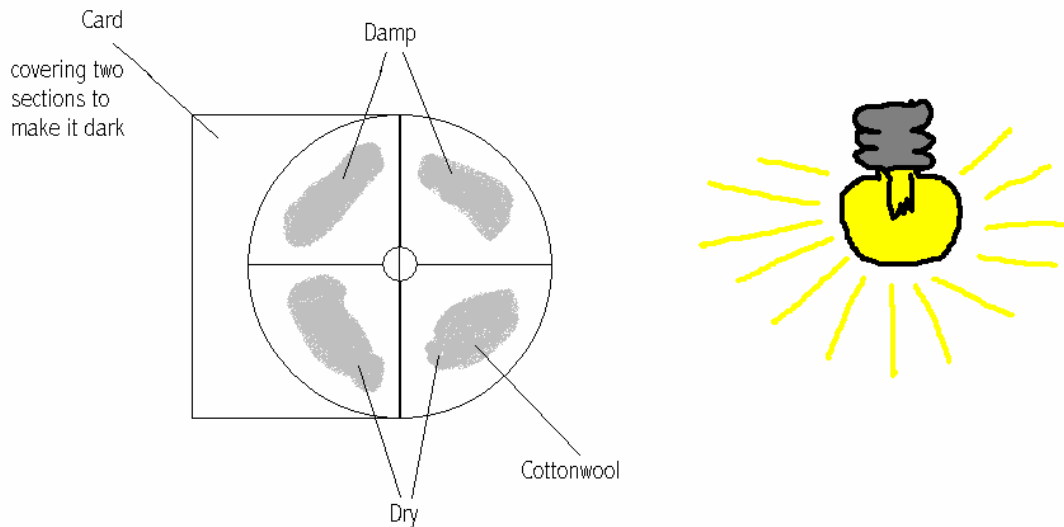


Liam Jackson

Investigation into the conditions that wood lice prefer

Method



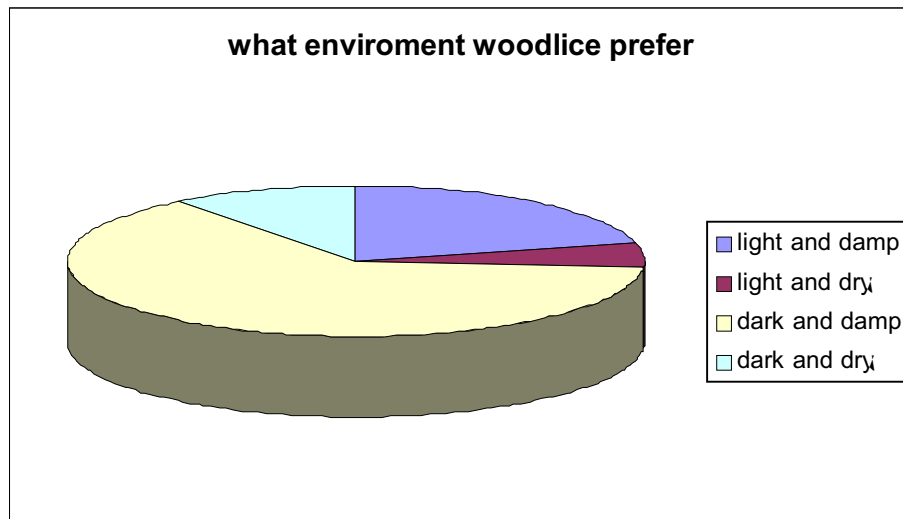
I am going to place twenty wood lice in the centre of a choice chamber with four chambers around it. The four chambers will be dark and damp, dark and dry, light and damp or light and dry. I am going to place the dish in a dark place with a light shining on it to simulate 24 hours of sunlight. The bulb will be 40 watts and 60 cm away from the dish as not to heat the dish. I will make two of the chambers dark by covering them in card so no light will get through. There will be a piece of cotton wool in each chamber. Two will be damp and two will be dry. Cotton wool is vegetable matter as it comes from a plant. Since wood lice eat this and they can also smell it which will attract them to it's preferred condition.

I will make it a fair test by having all variables such as heat and light constant by leaving it in a dark cupboard so it is not interfered by day and night. I will also make it fair by leaving it alone or the full 24 hours then record data.

I predict that the woodlice will prefer the dark and damp chamber because woodlice associate darkness with safety and protection. This is why woodlice live under such thing as stones because predators find it difficult to locate and get at them. They also like moisture because they are crustaceans and most other crustaceans live in water such as crabs.

I am also using 6 sets of results, one from each group in my class. I will then average out the data to account for anomalies.

Results



Group	Light		Dark	
number	damp	dry	damp	dry
1	5	0	10	5
2	3	1	16	1
0	0	0	17	3
4	9	4	4	3
5	3	2	13	2
6	2	2	15	1
total	22	9	75	15
average	4	1	12	2

My results show that the majority of wood lice prefer to live in dark damp conditions and hate living in light dry conditions. The trend is the dryer it gets then less wood louse will inhabit that area. Another trend is the lighter it gets the more the woodlice dislike it.

Conclusion

I found out that woodlice prefer dark damp conditions and that they dislike light dry conditions. This shows my prediction was correct. The woodlice prefer the dark damp conditions because they felt like the dark protects them by hiding under stones and this is hiding from predators. They also prefer the damp because they are crustaceans and most live in water. I also noticed that the dryer it gets the less woodlice go there. The woodlice also prefer the dark because the lighter it was the less woodlice were in the chamber. I can see this from my averages.

Evaluation

I thought the results were good except from group four whose results were in accurate as they don't fit the trends . This could have been because of something like the light bulb not working or the dish was too close to a radiator. This made it an unfair test.

I thought the experiment went well and I now know the reason for using 120 woodlice (over 6 groups) is because the more woodlice that we used the more accurate our results will be. This is because the majority will go to the most preferred chamber and this would not have been so clear if we used less woodlice. This would have made it more predictable.