

Carrion Insect Assignment

Extra Credit

Carrion is defined as dead and putrefying flesh. This might encompass anything from a mouse that dies in its burrow, to a deer that gets hit by a vehicle and “deteriorates” on the side of a road, to a human body that has been the subject of foul play and is buried in a shallow grave along the Green River in western Washington. Many insects including a number of beetles and flies are carrion feeders. Have you ever examined one of the dead animals that lie along the side of the road? Have you ever looked in a trashcan only to find a number of fly maggots that seemingly appeared from nowhere? Have you ever watched CSI or another program that discussed forensic science on television? Carrion insects certainly play an important role in the decomposition of dead and decaying animal matter.

This is a simple assignment that may or may not work for you. You will be given a plastic “deli” cup, a lid for the cup, and a small amount of raw hamburger. Place the cup (with the lid off) in an area where it will not be disturbed by other, larger animals that might want to eat the hamburger such as dogs, cats, coyotes, and so on. The cup should be placed out-of-doors. Watch the cup for a day or two and see if flies do not come to it and lay small white eggs on the top of the hamburger. The eggs are distinctive, but do not mistake small pieces of fat from the hamburger for the eggs. If a fly does arrive and lay eggs, you should see small maggots on and in the hamburger within another day or two. Watch the maggots as they develop. Within another week or so you should see the rounded pupal cases (cocoons) that the maggots form as they go from the larval stage to the adult fly. If and when you see pupae, place the lid on the container and place the container in a relatively cool and shady area (i.e., keep it out of the sun). You may want to punch a few holes in the container to keep moisture from building. Hopefully within another four or five days you should see adult flies in the container.

I want you to keep notes of how you are conducting this “experiment.” Record your observations. The assignment is due when you get adult flies or when you give up. But, do not give up too soon.

Example of notes:

3 September 2005

I went to the grocery store today and obtained a one-pound plastic deli cup into which I placed a small amount of raw hamburger. I placed my cup outside of my room on the windowsill. I used a small nail to hold the cup to the windowsill. The area in which the cup was placed is on the south side of the house and does not receive direct sun. The cup was put out at 5 pm.

The day has been partly cloudy with a high of 80°F expected and a low in the mid 50s this evening.

4 September 2005

Checked the deli cup at 6 am. Did not notice anything I would call fly eggs.

Checked the cup at 2pm. Did not notice anything I would call fly eggs.

Checked the cup at 6pm. There are 10-15 small white objects on the top of the hamburger. They appear to be fly eggs. They appear to be scattered randomly on the hamburger.

It has been a sunny day with very few clouds. High temperature of 83°F. Low of 53°F is expected tonight.

5 September 2005

8am. Nothing appears to have changed with the eggs. The hamburger is starting to look a little raunchy!

2pm. The eggs look to be hatching! There are three or four small maggots on top of the hamburger and eating their way down into it. I am adding a little more hamburger to the cup.

And so on...