

Unit 7 - Getting Together & Staying Alive Study Guide

Unit objectives:

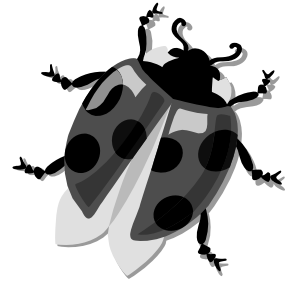
1. Name and describe five ways insects get together to mate.
2. Using an example, describe each of the different ways insects protect themselves that were discussed in the web lecture.
3. Define Mullerian and Batesian Mimicry.
4. Define and give examples of aposematic coloring/behavior.

Introduction

Looking & Smelling Good

Why did the Jewel mistake the beer bottle for a mate?

Why did the male silk moth have a hard time finding his mate once he got close to her?



Sounding Sweet

How does the Polka Dot Moth overcome the problem that the silk moth had once the male gets close to the female?

Why doesn't the Polka Dot Moth care if predators hear their broadcast?

Why does a leafhopper sound have to be as "private as a phone call?"

How does leafhopper "hear" with its feet?

How do cicadas, grasshoppers and crickets pick up sound?

Do crickets rub their legs together to make sound?

Lamp Light

How does a firefly use his/her light organ to attract a mate?

How does the *Photuris* species dupe the male of another species?

READ journal article attached. Why did Dr. Lloyd suspect this behavior was happening?
What date did he first observe it and where?

What university was Dr. Lloyd working at when he published his journal article?

Buying Love

How do stag beetles fight?

What country can you find these stag beetles in?

Where does the female fruit fly need to lay her egg on the walnut?

How do fruit fly males "fight" to lay claim to a walnut?

STAYING ALIVE

Timing

Why would an insect want to molt in the early morning? How would this be advantageous?

What happens to the level of JH in a diapausing adult?

What happens to the level of ecdysone in diapausing pupae?

Radar detection & Hiding

How does the praying mantis escape the bat?

List two or three ways insects camouflage themselves.

Speed & Armor

What happens to the beetle when the Land Rover runs over him?

Armed & Dangerous

Can the stinger keep stinging you once the honeybee has left it behind? Why?

Chemical Warfare

How does the Bombardier beetle ward off predators?

Why won't the scrub jays eat the *Utetheisa* moth?

How does the moth's coloring warn predators not to eat it?

How does a wasp's coloring warn predators?

What is aposematic coloring or behavior?

Imposters

What is Batesian mimicry? Give an example.

What is Mullerian mimicry? Give an example.

Migration

Give two examples of insects that migrate? What are some reasons insects migrate?

How do insects prepare for migration?