

LENScience Senior Biology Seminar Series Student Update Number 10 – 30th August 2010

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Seminar 6: What's going on?

Last week's seminar proved to be a very interesting one and prompted a quite different style of discussion on the seminar chat. We were pleased with the number of searching questions that were asked by the students at the end of the seminar. This has made choosing the best question very challenging. We'll announce the winner in the next Update. Answers to the seminar questions will go up on the Seminar Question page later this week.

A big thank-you to the students from Riccarton High School, Unlimited Paenga Tawhiti, Christchurch Girls High School and Hillmorton High School for taking part in the video conference. Well done.



Seminar 6: Challenge Questions

There are three Challenge questions from the seminar last week. Below we've unpacked two of them to help you with structuring your answers.

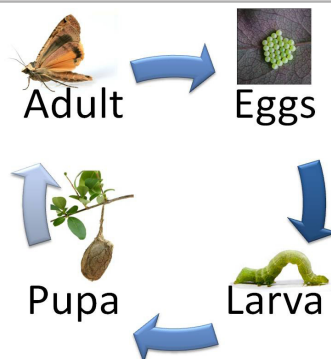
Challenge 1

Lack of appropriate food resources can affect the survival and effectiveness of natural enemies. One effect of insufficient resources is on sex ratios of the adults. Explain how a sex ratio that is biased towards males can impact on the ability of the parasitic wasp to control the pest.

Unpack...

How does a parasitic wasp control a pest like leafroller?

What's the connection between this method of control and having more males than females?



Challenge 2

Over the last 10 years headlines like this "Bee decline puts world food supply at risk" have increasingly appeared in the media. Explain the possible causes of the decline in bee numbers and discuss why this puts the world's food supply at risk.

Unpack....

Why are bee numbers declining?
What role do bees play in agricultural ecosystems?
How does this link to food supply?



Remember, the next seminar is two weeks away so you have an additional week to think about these challenge questions. So choose your challenge and post your ideas here: [Seminar 6 Discussion Pages](#).

Next Seminar

Date: Thursday 16th September

Topic: Rethinking Polynesian Origins: Human Settlement of the Pacific

Presenters: Professor Lisa Matisoo-Smith, Michal Denny

The question "where do we come from?" is universal – all cultures have their myths and stories of where they came from. It's also one that interests science as you will know from your studies of Human Evolution.

Closer to home, scientists like Allan Wilson Centre researcher Lisa Matisoo-Smith, are working on finding the answers to questions about the origins of Polynesians and human settlement of the Pacific.



This seminar will look at Lisa's work and how the story of human settlement of the Pacific has changed as a result of advances in biotechnological techniques. It will also look at examples of population bottlenecks and founder effects in the evolution of modern Polynesians.

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