

NEWS

Potentially great poultry researcher in the making

Callum Bailey is a Year 4 student at The Redeemer Baptist School, North Parramatta and with the encouragement and aid of his science teacher Janelle Seaman, he has been conducting research into chicken eggs and general knowledge amongst consumers about how the eggs develop.

His work has attracted the attention of both the Australian Chicken Meat Federation through its '2008 Myth Buster' prize offered for primary school students, and the Poultry Industry CRC.

In fact, Dr Mingan Choct, the CRC CEO contacted *Poultry Digest* in order to reveal Callum's remarkable efforts in the field of layer research.

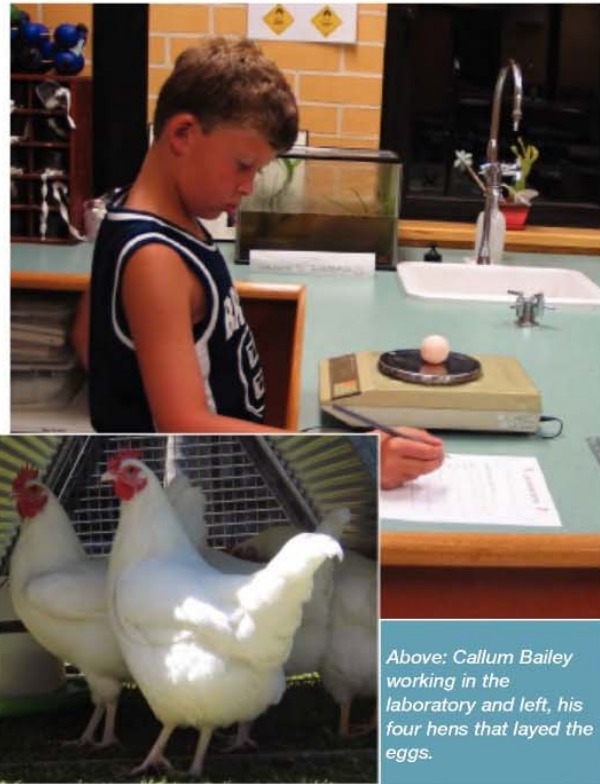
Callum's first project, conducted in 2008 while he was in Year 3, was to find answers to the question 'What happens to the mass of a chicken egg as the chick grows?'

Callum weighed the fertilised eggs daily and recorded percentage change until hatch (average for 16 eggs 14.58%).

Eggs were weighed at the same time each day but on one occasion he missed the evening weigh, performing the operation the next morning.

This produced a blip on his graph of weight loss – the only deviation for an almost perfect linear decrease.

Having established his weight loss during chick development he questioned a structured group as to their perceptions on the phenomenon – his Myth Buster exercise.



Above: Callum Bailey working in the laboratory and left, his four hens that layed the eggs.

His sample was 100 individuals in age groups from 0-16-17-25, 26-45, and 45+

"The percentages of people who believe that the mass stays the same or increases are always larger than the percentage of people who correctly state that the mass decreases.

"The percentages are worse for the youngest and oldest age groups," Callum observed.

"I was surprised at the number of professional people – especially doctors, who did not know the correct answer," he added.

Callum's next experiment conducted between January and July 2009, was to establish if the maximum temperature of a day affects the amount of eggs laid by his four hens.

This experiment was greatly assisted by the fact that information used by sourcing the Bureau of Meteorology website could be identified from a weather station across the road from Callum's house and site where the hens were housed – little doubt about accuracy of key data then!

His next project will involve shell thickness difference between summer and winter periods – that's for 2010.

The key drivers of Callum's research are a genuine enthusiasm for poultry, plus a supportive science teacher and school environment.

It is little wonder that scientists at the Poultry Industry CRC like Dr Mingan Choct and Dr Julia Roberts were impressed.

Look out for Callum Bailey: a few years down the track, with any luck he will be one of those leading edge young scientists whose determination and inquiring mind will drive our industry to greater efficiencies and deliver the consumer a better product.