



# Year 10 Biology Field Day

Hannah Douglas Year 11

Towards the end of June 2016, the whole of Year 10 embarked on a journey of discovery that no one will ever forget. Year 10 pupils from the first half of the Year group got to enjoy the wonders of Biology, while the second half completed an important 'Heart Start' activity. We all arrived into school, dressed in P.E. gear, anticipating the day of excitement that lay ahead. We received a briefing on what we were to do and then trekked up the colossal hill to the top rugby pitches, where we commenced some random and systematic sampling.

First we used little devices called pooters. Much to the fear of many Year 10s, you had to suck one tube of the pooter and hold the other over the insect. The sharp intake of breath created pressure in the main container so it pulled in air and an insect or two via the other tube. Thankfully there was a stopper on the end of the tube, which prevented us from inhaling the insect, but nevertheless it proved to be a somewhat traumatic event for many!

Next we used "sweep nets", which required us to sweep them through the longer grass under the trees and catch

insects, which we all did relatively well. Then we hit trees with metre sticks to try and shake down bugs, and by the end of the day a few people's heads were covered with bugs and leaves, but it was all in good nature. This method of sampling is called tree beating, which involves trying to gently dislodge the small insects living in the branches, so that they fall out of the tree onto a white tray, where they then can be collected using a pooter and then recorded.

Naturally, as time flies when you are having fun, it was soon break and we all sprinted to the canteen to be first to get food. We were then required to go to our regular biology classrooms to do some testing soil activities and have a pooter race. That was probably the most competitive part of the day. We all had a race to see who could suck up the most rice grains with a pooter. We were divided into two teams and the rest fell into place from there... Afterwards, we made our own filters out of recycled plastic bottles and mesh and filtered different types of soil.

After a century of soil experiments, it was lunchtime and we returned again to

the great outdoors! Mr Kennedy spoke about belt and line transects, as well as the last few sampling methods using quadrats. In case you are wondering what a quadrat is, in basic terms, it's just a metal frame  $\frac{1}{2}$  metre long and wide that is placed on the ground randomly (according to co-ordinates picked beforehand) or systematically along a belt transect line. In short, it marks out a small area of ground to be sampled, in which plants can be identified and counted. We used these handy devices to save us from having to count every blade of grass on the top pitches and we found a range of different plants. There was a high amount of both clover and plantain with smaller amounts of dandelion, daisy and buttercup alongside. We also had a leaf treasure hunt and used leaf identification charts to hunt for different species of trees and small plants.

Overall I thought that it was a really fun and memorable way of gathering information and gaining further insight into these topics. I would really recommend making the most of this educational field study when you reach Year 10, as we cover a lot of Ecology in Year 11.