

## **George Beccaloni's speech given at unveiling of Rodney Munday's Wallace sculpture in Hertford 18/10/2014**

Although Wallace is not exactly a household name these days, he was actually one of the most famous people in the world when he died in 1913 aged 90. During his long life he wrote more than 1000 articles and 22 books on a wide variety of subjects, and in these he made numerous important contributions to many fields of science including biology, geography, geology, anthropology and even astrobiology – the study of life on other planets. His work on animal distribution resulted in the creation of a whole new field, evolutionary biogeography, and his work on evolution led to his independent discovery of evolution by natural selection, a theory he published jointly with Charles Darwin in 1858.

Wallace was born on the 8th of January 1823 to a downwardly mobile middle-class English couple Thomas Vere and Mary Ann Wallace. Wallace's father was of Scottish descent (reputedly, of a line leading back to the famous William Wallace); whilst the Greenells were a respectable Hertford family. His great grandfather on his mother's side was twice Mayor of Hertford (in 1773 and 1779). Wallace's father was a qualified solicitor, but he had never practised and had been living off inherited wealth which was dwindling as his family grew.

Wallace was born in a modest cottage near Usk, which at that time was part of England, but which is now part of Wales. His father had moved to the area from London in an attempt to reduce living costs.

Wallace and his family moved to Hertford in late 1828 or early 1829 when Wallace was 5 or 6 and during the time they lived in the town they occupied 5 houses, at least 4 of which survive. It was in Hertford that Wallace received his only formal education at Hale's Free Grammar School. The school later became the Richard Hale School and although it has moved site the original old building survives.

Wallace probably began his schooling in late 1830, when he was nearly eight – this being the usual age of young entrants to the school. He described the school as follows:

“The school itself was built in the year 1617...[the year it]...was founded. It consisted of one large room, with a square window at each end and two on each side...The schoolroom was fairly lofty. Along the sides were what were termed porches--desks and seats against the wall with very solid, roughly carved ends of black oak, much cut with the initials of names of many generations of schoolboys...As we went to school even in winter at seven in the morning, and three days a week remained till five in the afternoon, some artificial light was necessary, and this was effected by the primitive method of every boy bringing his own candles or candle-ends with any kind of candlestick he liked...”

"The regime at the school was very strict and Wallace described the headmaster, Mr Clement Henry Crutwell, as “an irascible little man with a limp owing to one leg being shorter than the other...Flogging with a cane was not uncommon for more serious offences, while for slighter ones...[Crutwell]...would box the ears pretty severely. If a boy did not obey his orders instantly, or repeated his offence soon afterwards, however trifling it might be, such as speaking to another boy or pinching him surreptitiously, he often, without another word, came down from his desk and gave the offender a resounding box on the ear. On one occasion I well remember his coming down to a rather small boy, giving him a slap on one side of his head which knocked him down flat on the seat, and when he slowly rose up, giving him another, which knocked him down on the other side...Mr. Crutwell always caned the boys himself, but the other masters administered minor punishments, such as slight ear-boxes, slapping the palm with a flat ruler, or rapping the knuckles with a round one.” - I'm sure the current Headmaster is a lot nicer!

The original school building in Hale Street still exists but it has been extended and is now used to house (or did house until recently) the Longmore Education Support Centre .

In about 1835 Wallace's father was swindled out of his remaining property and the family fell on really hard times; Wallace was forced to withdraw from school in March 1837 aged only 14, and shortly afterwards he went to work for his brother William as an apprentice land-surveyor.

A slump in the surveying business in 1843 led him to take a teaching job in Leicester, where he met another budding naturalist, Henry Walter Bates. In 1848, Wallace and Bates travelled together to the Amazon to collect natural history specimens (mainly butterflies, beetles and birds), which they planned to sell to collectors and museums in Europe to fund their trip. Unfortunately when Wallace was on his way back to England in 1852, disaster struck:- the ship he was on caught fire and sank, together with many of his irreplaceable specimens and notes! Luckily his agent in London had had the good sense to insure Wallace's collections! Wallace and the crew struggled to survive in a pair of badly leaking lifeboats, and fortunately after 10 days drifting in the open sea they were picked up by a passing cargo ship making its way back to England.

A few days after getting back to Britain Wallace vowed to never travel by sea again, yet good resolutions soon fade, and two years later he was in South-East Asia, at the start of an eight-year 14,000 mile journey of collecting and exploration that would yield an extraordinary 126,000 biological specimens, including more than five thousand species new to science. It was during this trip that Wallace made his greatest scientific discovery. He was suffering from an attack of fever on the island of Halmahera in the Moluccas in February 1858 when suddenly the idea of natural selection as the mechanism of evolutionary change occurred to him. As soon as he was able to he wrote down his thoughts and sent them off to Charles Darwin, who he knew was interested in what was then known as "species transmutation". Unknown to Wallace, Darwin had in fact discovered natural selection about 20 years before, but had been procrastinating about publishing the idea. Darwin was therefore horrified when he received Wallace's letter, and appealed to his

friends the geologist Charles Lyell and the botanist Joseph Hooker for advice on what to do. To cut a long story short, Lyell and Hooker, decided to present Wallace's essay (without asking his permission!), along with some unpublished fragments from Darwin's writings on the subject, to a meeting of the Linnean Society of London on 1 July 1858. These documents were later published in the Society's Journal as a co-authored paper – with Darwin as the first author! Even though Darwin's book the *Origin of Species* was published more than a year after this article, most people today mistakenly believe that the theory was first proposed by Darwin in his book.

Wallace returned to England in 1862 and spent the rest of his long life explaining, developing and defending the theory of natural selection, as well as working on a very wide variety of other (sometimes controversial!) subjects. He became very famous during his lifetime but after his death in 1913 he was overshadowed by Darwin.

The sculpture which I am about to unveil will serve as a visual reminder of Wallace's link with this town. There are a few other memorials to Wallace in the town, such as the limestone roundel in the pavement of the Bircherley Green shopping centre (which I actually helped to design), the 'Wallace Meets Rousseau' mural near Waitrose, the plaque on number 11 St. Andrew's Street, and the evolution sculpture near Sainsbury's, which features two images of Wallace's flying frog. However, this is Hertford's first sculpture of the great man. Indeed it is one of only a handful of sculptures of Wallace in the world – whereas there are hundreds of Darwin!

I would like to thank all of you for turning up today. Especial thanks go to Malcolm Ramsay for all his hard work in overseeing this project and for helping to organise today's event. I would also like to thank East Herts Council, Hertford Town Council and Hertford Civic Society for funding the sculpture; Hertford Civic Society who came up with the idea of the piece in the first place; and the staff of East Herts Council for their practical assistance – not least the staff of the Theatre. I also thank the Jazz musicians of Richard Hale school for providing the music; and last, but by no means least, we all thank

Rodney Munday for producing such an evocative artwork, which will certainly help in keeping Wallace's memory alive in Hertford.