

HISTORY OBJECTION

The inclusion of Bryncoch farm as a prospective housing development site is objected to on the grounds of the History of the site, which was unknown to ,and therefore not considered by the Inspector . The site has historical significance due to its importance in the development of the Great Victorian Naturalist Alfred Russel Wallace. In addition the site has the remnants of a “Green Lane” which potentially dates back to the Cistercian monks at Neath Abbey and requires further investigation.

PLANNING POLICY AS DEFINED IN THE UDP

Your attention is drawn to the following text from the revised UDP:-

Policy 6 begins with:-

The County Borough’s historic environment including archaeology, ancient monuments, listed buildings, conservation areas and historic parks, gardens and landscapes will be protected and proposals that would aid its preservation and enhancement will be supported.

And paragraph 8.4.1 of the policy states:

One of the key aims of sustainability, and in some ways the most important, is the protection and enhancement of the environment. A central theme of agenda 21 is that the present generation holds the world, or our portion of it, for our children and future generations. Of course, this includes our history, traditions, landscapes and quality and amenity of our towns and settlements. It also includes our **most precious resources** : water, air and soil, **habitats and wildlife**, natural and finite resources and **our historic environment**. (Author’s highlights)

It is considered that this part of the policy would support efforts to protect and conserve the site of Bryncoch Farm.

In addition under the section Environment - Current policy paragraph 8.1.11 states:-

The County Borough as local planning authority has the duty of designating any area of “special architectural or historic interest” the character of which it is desirable to preserve. There are seven within the County Borough Council and the designation of further areas will be considered.

Surely few areas would provide the history and ecology of Bryncoch Farm for such a designation.

ALFRED RUSSEL WALLACE

A short biography of his life has been prepared for us by James Williams – a Lecturer at Sussex University, and it helps to put his importance into perspective.

The Forgotten Evolutionist

Alfred Russel Wallace (1823 – 1913)

Alfred Russel Wallace doesn't immediately spring to mind as one of the great scientists of the nineteenth century. Charles Darwin is the name every boy and girl learns as synonymous with the theory of evolution. Yet an essay sent by him to Charles Darwin in 1858, on a theory of evolution, shook Darwin to the core. Alfred Russel Wallace's contributions to science are little known to the general public. But how important was his time spent in Neath? He wasn't born in Neath, he didn't spend his final days at Neath, he had only two short spells living in Neath. They were, however very important times for the young Wallace. He saw his time at Neath as a 'turning point' in his life. Indeed Neath should be regarded as the place where Wallace's determination to discover 'the origin of species' had its own beginnings.

Alfred Russel Wallace was born in 1823 in Kensington Cottage, Llanbadoc, near Usk. He was the eighth of nine children. As a small boy he played on the riverbank, caught lampreys with his brothers and listened to Aesop's fables while sitting on his mother's knee. Due to money worries, the family relocated from Llanbadoc to Hertford in 1828, where he attended the local Grammar school. When his father was declared bankrupt he was forced to leave school and took up apprenticeships in watch making and surveying. At the age of 18 he made his first journey to Neath, to join his elder brother, William, in his surveying business. The two young men took lodgings at Bryncoch Farm with the farmer, David Rees and his wife. While at Bryncoch he describes the locality – very much the same today. He swam in the rock pool, he explored the countryside and began his unofficial training as a young field naturalist.

It seems he also had an eye for the young ladies of Neath saying: *"the girls are often exceedingly pretty when about fifteen to twenty, but after that hard work and exposure make their features coarse, so that a girl of twenty five would often be taken for nearer forty"*.

William's business didn't attract enough work for both men giving the young Alfred lots of time to explore the countryside. This signalled the beginning of 'Wallace the naturalist'. Not content to just look at the plants he came across in the countryside, he wanted to identify them. To do this he needed books that would tell him how to identify plants. David Rees, of Bryncoch farm took the *Gardener's Chronicle* a magazine that also advertised botanical books. In one copy of the Chronicle Alfred found an advertisement for a new edition of Lindley's *Elements of Botany*. Using Mr Hayward's bookshop in Neath he ordered it, though the price of 10s 6d was really more than he could afford. With great expectation he collected the book some weeks later only to find to his great disappointment that it didn't describe any of the plants he was likely to find.

Confiding his disappointment to the Mr Hayward, he was lent a copy of Loudon's *Encyclopaedia of Plants*, a much better guide to the local flora. Over the coming weeks he painstakingly copied out descriptions of local plants on sheets of paper which he slipped into his own book. This was the start of his education as a naturalist.

When surveying work dried up, William could no longer support his brother and Alfred was forced to look elsewhere for work. Though it was never his intention to become a teacher, he nevertheless found employment at the Collegiate School in Leicester. Here he met Henry Walter Bates, another amateur naturalist, and began discussing the possibility of travelling to far off places. He was also introduced to beetle collecting in Leicester (something Charles Darwin also enjoyed).

Then tragedy struck. His brother William died suddenly from pneumonia. William had been giving evidence to the railway committees in London and on the journey back to Neath, travelling third class on the railway, he caught pneumonia.

In 1845 Alfred, aged 22, returned to Neath to take over his brother's business. He disliked it. Collecting debts caused him grief, with some farmers claiming that they had paid his brother already. Alfred continued to keep in touch with Bates and letters between them at the time showed that he was thinking of bigger things; a trip to South America to discover the origin of species. The problem was one of money, how to raise enough to fund the trip to South America.

He was commissioned to design and build the Mechanic's Institute in Neath. With the small profit from this commercial venture and some money from part time teaching he travelled with Bates to South America in 1848. After four years of collecting, Alfred's younger brother, Herbert, decided to join him in South America. Tragedy struck again as Herbert Wallace was struck down by yellow fever and died. This came as a heavy blow to Alfred and he decided to return home with the bulk of his collection.

More bad luck was to befall him. After a month at sea his ship caught fire and sank. He lost his collection. The passengers and crew were thankfully rescued after 10 days adrift and transported back to England. After landing in Deal, Kent with nothing more than a thin calico suit and a tin of drawings of palm trees, he determined to travel once more, this time, to the Malay Archipelago. With insurance money from his lost collection he planned his trip and wrote his first scientific book *Palm Trees of the Amazon*.

He sailed to the Malay Archipelago in 1854 as a professional collector sending specimens of new and rare species back to England to be sold to museums and private collections. In 1855 he published his first essay on the subject of evolution, but it did not explain the mechanism for evolution. This essay came to the attention of Charles Darwin, who wrote complimenting him on his work. Darwin was also warned by close friends that Wallace was writing about matters close to Darwin's own work, but Darwin did not take heed of the warnings.

Three years later in early 1858, as Alfred suffered from a fit of malaria, he recalled an essay by Thomas Malthus on populations. This gave him a mechanism for evolution. The fittest in a population will survive the weakest will die. Over two evenings Wallace wrote out his 'new' theory and sent it to Darwin, the man who had commented favourably on his earlier essay. The idea it seems was not new to Darwin. At this point all the credit seems to go to Wallace.

When Alfred Russel Wallace's letter dropped on the doormat of Down House in Kent, Charles Darwin was in no condition to deal with it. His baby was seriously ill and his scientific achievements seemed doomed to be overshadowed by Wallace. Darwin contacted his friends Charles Lyell, the geologist, and Joseph Dalton Hooker the botanist and asked their advice. Lyell and Hooker knew immediately what to do. They arranged for extracts from a letter written by Darwin in 1844 where he sketched his theory and Wallace's essay to be read to the Linnean Society of London on July 1st 1858. They made it clear in their introduction that Darwin had come to the theory first though had not written anything intended for publication. They read Darwin's extracts first followed by Wallace's essay. And so was born the theory of evolution by means of natural selection. In 1858, however, the scientific establishment didn't recognise the importance of this theory. Its impact was clear to see over a year later, when Charles Darwin, urged on by his friends published *On The Origin of Species* in the November of 1859.

Darwin's book hit the shelves and caught the public imagination. Wallace was still in Malaysia unaware of the commotion 'Darwin's theory' had caused. So was Wallace pushed out of the limelight deliberately? Was his work justifiably relegated to second place? How should the world remember Wallace today?

Some people have tried to suggest that the official story of Wallace's contribution and the degree to which Darwin had finalised his thinking on the subject is not wholly correct. Vital correspondence between Darwin, Wallace and Lyell from around the time of Darwin's receipt of Wallace's essay is missing as is the original essay. Additions to Darwin's draft manuscripts for a big book he was writing on evolution were made around the time of his contact with Wallace, raising the question as to whether or not Darwin was influenced by Wallace's work. Two things remain a matter of record; Alfred Russel Wallace was not of the same social standing as Darwin, although he came from a professional family and the scientific establishment and the first publication of the theory of evolution by natural selection was a joint publication.

If anyone should have felt hard done by it was Alfred Russel Wallace himself, but at no point did he ever claim that he was cheated or 'hard done by'. In fact he called his own book on evolution, a collection of lectures given on a tour of America, Darwinism and at one point claimed to be 'more Darwinian than Darwin'. Wallace also gave Darwin the phrase which is most often mistakenly attributed to Darwin 'survival of the fittest'. The term was actually coined by Herbert Spencer the philosopher and biologist. Wallace suggested it to Darwin. It is also one of the most misunderstood phrases in evolution, with most people thinking that fittest means strongest. It actually means best suited to the environment.

Perhaps we should no longer refer to "Darwin's theory" but the "Wallace/Darwin theory of evolution by Natural Selection".

Alfred Russel Wallace did not confine his talents to one discipline. He is the founder of the science of biogeography (the study of the location of different groups of flora and fauna) writing a two volume study called *The geographical Distribution of animals*. He wrote a vast number of essays, books and articles on scientific and social issues extending his interests to works on Mars and its 'canals'; the prospect of life existing elsewhere in the universe; land nationalization (Wallace believed that no person should own land, only the buildings that are on the land) and psychic phenomena. The latter being something that his contemporaries were dismissive of and that today still tarnishes his standing with some historians and writers. His lasting scientific discovery for many biologists is a line separating two distinct groups of plants and animals in the Far East that is still referred to as Wallace's Line.

What is certain is that Alfred Russel Wallace was a celebrity of his time, often called upon to write popular articles for newspapers and magazines and he was also interviewed in what is best described as turn of the century 'OK' and 'Hello' style magazine articles. He was awarded many honorary degrees, even refusing some. He was awarded the Order of Merit

and, with the help of Charles Darwin he was given a civil pension by Gladstone. Even after his groundbreaking work on evolution, he was never far from controversy. After winning a substantial bet to show (using his surveying skills) that the surface of the earth was curved and not flat, Alfred and his wife were hounded by the flat Earther John Hampden. Despite winning court cases against Hampden, the stalking of Alfred continued and, in the end, he returned the bet he had won. When Darwin died in 1882, Wallace was a pall bearer at his funeral.

Any association with Alfred Russel Wallace should be a source of pride for the community. Neath should be proud of its influence on the young naturalist and proud that the surrounding countryside should inspire this great man to learn about nature and decide to uncover one of the greatest mysteries of life, its origin.

James Williams
Lecturer in Science Education
University of Sussex

The Mechanics Institute in Neath, designed and built by Wallace and his brother, is the focal point of his presence in Modern Day Neath. However the site at Bryncoch farm is critically tied to his development as both a scientist and more importantly as a pre-eminent Naturalist - but let's allow the man to speak for himself:-

ALFRED RUSSEL WALLACE AT BRYNCOCH FARM

In chapter XI of his autobiography "My Life" Alfred Russel Wallace describes his interests and development while staying at Bryncoch Farm for over a year in 1841/42. On his arrival he was 18 years of age. He and his brother came to Neath to partially survey and make a corrected map of the Parish of Cadoxton-juxta-Neath. The following extracts are taken verbatim from this chapter.

We lodged and boarded at a farmhouse called Bryn-coch (Red Hill), situated on a rising ground about two miles north of the town. The farmer, David Rees, a rather rough, stout Welshman, was also bailiff of the Dyffryn Estate.....

Here we stayed more than a year, living plainly but very well, and enjoying the luxuries of home-made bread, fresh butter and eggs, unlimited milk and cream, with cheese made from a mixture of cow's and sheep's milk, having a special flavour which I soon got very fond of. In this part of Wales it is the custom to milk the ewes chiefly for the purpose of making this cheese, which is very much esteemed.

Another delicacy we first became acquainted with here was the true Welsh flummery, called here "sucas blawd" (steeped meal), in other places "llumruwd" (sour sediment), whence our English word "flummery". It is formed of the husks of the oatmeal roughly sifted out, soaked in water till it becomes sour, then strained and boiled, when it forms a pale brown sub-gelatinous mass, usually eaten with abundance of new milk. It is a very nourishing food, and frequently forms the supper in farmhouses.

A little rocky stream bordered by trees and bushes ran through the farm, and was one of my favourite haunts. There was one little sequestered pool about twenty feet long into which the water fell over a ledge about a foot high. This pool was seven or eight feet deep, but shallowed at the further end, and thus formed a delightful bathing-place. Ever since my early escape from drowning at Hertford, I had been rather shy of the water, and had not learned to swim; but here the distance was so short that I determined to try, and soon got to enjoy it so much that every fine warm day I used to go and plunge head first off my ledge and swim in five or six strokes to shallow water.
(the pool is still used by local youngsters)

During the larger portion of my residence at Neath we had very little to do, and my brother was often away.....

I occupied myself with various pursuits in which I had begun to take an interest..... But what occupied me chiefly and became more and more the solace and delight of my lonely rambles among the moors and mountains, was my first introduction to the variety, the beauty, and the mystery of nature as manifested in the vegetable Kingdom.

At length , soon after we came to Neath, David Rees happened to bring in an old number of the *Gardeners Chronicle* , which I read with much interest, and as I found in it advertisements and reviews of books, I asked him to bring some more copies, which he did and I found in one of them a notice of the fourth edition of Lindley’s “Elements of Botany”The price of 10s6d rather frightened me ,as I was always very short of cash.....I ordered it at Mr. Hayward’s shop.

When at length it arrived, I opened it with great expectations, which were, however, largely disappointed, for although the latter part of the book was devoted to systematic botany, and all the natural orders were well and clearly described, yet there was hardly any reference to British Plants.

I asked Mr. Hayward if he knew of any book that would help me. To my great delight he said he had Loudon’s “Encyclopaedia of Plants” which contained all the British plants, and he would lend it to me, and I could copy the characters of the British species. I therefore took it home to Bryn-coch, and for some weeks spending all my leisure time in first examining it carefully, finding that I could make out the genus and the species of many plants by the very condensed but clear descriptions.....

This also gave me a general interest in plants, and a catalogue published by a great nurseryman in Bristol, which David Rees got from the gardener, was eagerly read....

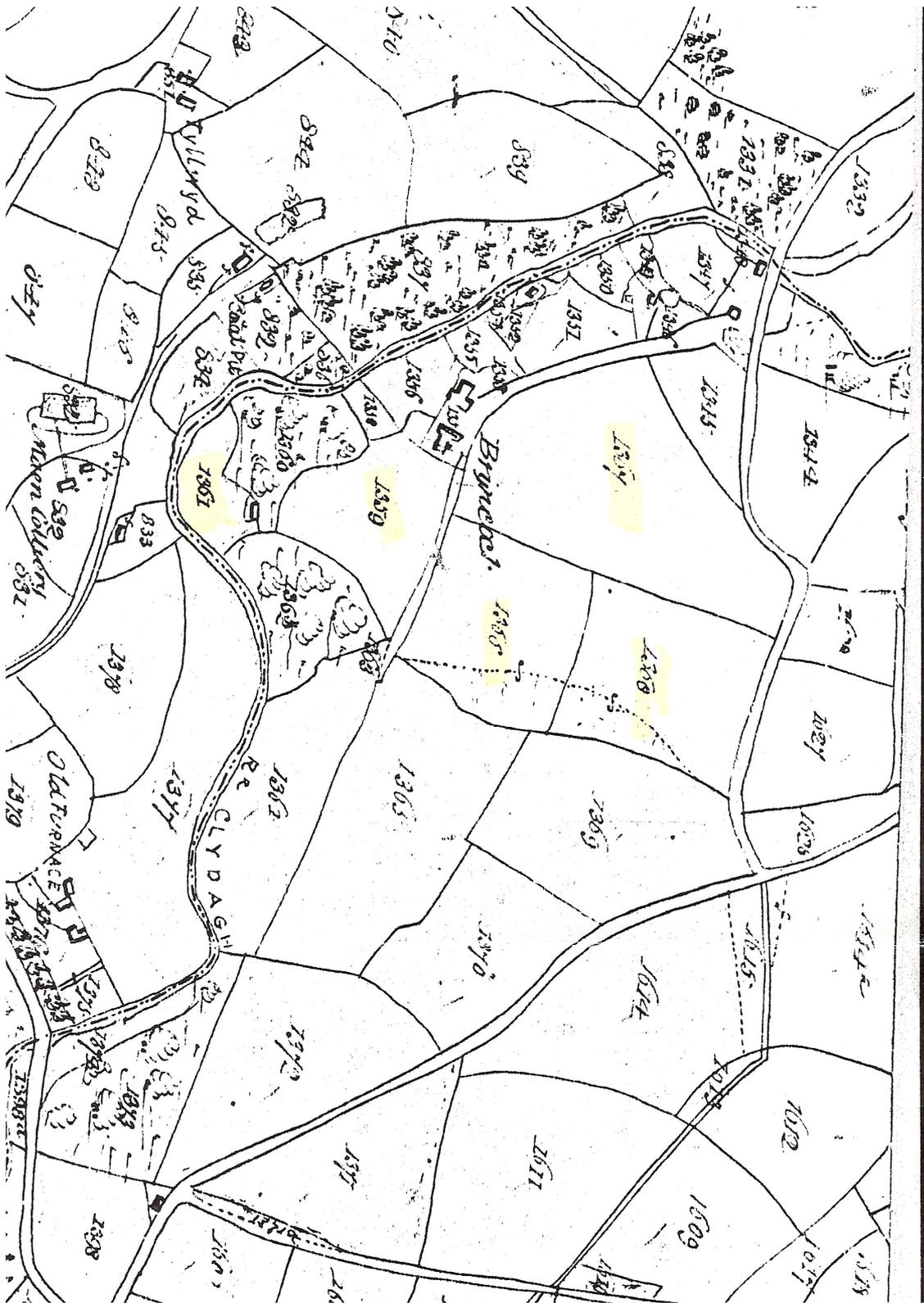
But I soon found that by merely identifying the plants I found in my walks I lost much time in gathering the same species several times, and even then not being always quite sure that I had found the same plant before. I therefore began to form a herbarium, collecting good specimens and drying them carefully between drying papers and a couple of boards weighted with books or stones.....My delight, therefore, was great when I was now able to identify the charming little eyebright, the strange looking cow-wheat and louse-wort, the handsome mullein and the pretty creeping toad flax.....

Now, I have some reason to believe that this was the turning point of my life, the tide that carried me on, not to fortune but to whatever reputation I have acquired, and which has certainly been to me a never-failing source of much health of body and supreme mental enjoyment.

Who then, can doubt the importance of this area to this man and indeed the importance of this man to our understanding of the natural world.

First comes a modern aerial photograph with the existing field boundaries. It will be noticed that with the exception of the small re-alignment of the A474 the field boundaries are almost identical to those in the excerpt from the parish map from the mid 1840’s that follows it – note the field numbers 1355,1357,1357,1359 which are identified in the excerpt from the parish register that follows it –obtained, ironically from the archives now held at the mechanics institute.





Excerpt from Parish Map mid 1840's

C—London: Printed and Published (By Authority) by Shaw & Sons, Limited, 25, Abchurch Lane, in the Strand, W.C.2.

LANDOWNERS	OCCUPIERS	Numbers relating to the Plan.	NAME AND DESCRIPTION OF LANDS AND PREMISES.	STATE OF CULTIVATION.	QUANTITIES IN STATUTE MEASURE.					PAYABLE TO		PAYABLE TO	
					1.	2.	3.	4.	5.	6.	7.	8.	
Williams John (Incorporated) Williams & Co. Smeeth & Co. Howe & Co. as Mgt. continues	James Rice continues	1367	Lea Wharf	Wharf & Lea	56	2	1	11	10	3	9	12	
		1369	Lea Wharf	Pasture	10	2	15	6	4	1	8	9	
		1361	Bot and gardens	do	3	3	22						
		1360	Wharf	Wharf	2	3	32						
		1358	Lea and garden	Wharf			28						
		1356	Lea	Wharf	1	1	12						
		1357	Baywood, Domestic garden	Pasture			23						
		1355	Wharf	Wharf			36						
		1354	Garden	Wharf			13						
		1344	Wharf & Lea	Wharf	4	1	17	2					
Thomas Jenkins	James Rice continues	1342	Rough Pasture	Pasture	5	1	25						
		1348	Garden	Wharf			22						
		1339	Gymnasium	Wharf			19						
		1340	Wharf	Wharf	6	1	15	6					
		1341	Lea and garden	Wharf	5	1	15	4					
		1335	Lea and garden	Wharf	4	2	10	1					
		1334	Wharf	Wharf	3	2	23						
		1336	Wharf	Wharf	5	3	28						
		1337	Wharf	Wharf	5	1	20	10					
		1338	Wharf	Wharf	2	1	13						
James Rice	James Rice	1322	Wharf	Wharf	3	2	14						
		1321	Wharf	Wharf	32	22		1	6	8			
		1320	Wharf	Wharf									
		1319	Wharf	Wharf	5		2						
		1318	Wharf	Wharf	6	3							
		1317	Wharf	Wharf	20	2							
		1316	Wharf	Wharf	6	3	26						
		1315	Wharf	Wharf	3	3	31						
		1314	Wharf	Wharf	2	1	35						
		1313	Wharf	Wharf	1	1	7						

THE GREEN LANE

A track of one carriage width , lined with trees on each side, and sunken below the level of the surrounding field runs for a short way through the site. Oral tradition has it that this was once the old road to Ammanford and Carmarthen. It is possible that it is linked with the Cistercians of Neath Abbey. Clearly it is worth further investigation even though, as shown in the attached photographs it is now overgrown.



