

A secret Gun Site in Llanelli

Most people are unaware that during the Second World War, the Burry Estuary was one of the locations chosen to test chemical and biological warfare weapons. The war had started in 1939 and by 1940 it was feared that a German invasion might be attempted following the heavy military defeat at Dunkirk. Many thought that the Germans were unstoppable and Winston Churchill, alarmed at how vulnerable Britain seemed to be ordered plans for a network of trenches to be dug around the coastline. He also commissioned a secret report on whether mustard gas could be used at key points along the beaches. Churchill had written that he was convinced that the enemy would have no scruples in adopting such methods in their own use of gas.

From 1937, the Japanese had been using gas and biological weapons in China. And the Japanese Plant Pingfan in Manchuria had been manufacturing eight tons of bacteria every month. Four thousand anthrax bombs had been produced and stockpiled, with the knowledge that each Japanese bomber was capable of carrying a payload of twelve bombs. In one trial alone in Manchuria, four hundred horses, five hundred sheep and several thousand rats and mice had been killed. Intelligence reached Britain that Japan had communicated all their research to their Axis Partners, Germany and Italy.

British politicians decided that it was necessary for Britain to prepare a defence for this new type of germ warfare. A department was set up and in October of 1940 a group of twelve scientists arrived at Porton Down on Salisbury Plain, whose purpose it was to prepare a programme for testing and experimenting with chemical and biological weapons. The team was led by Dr. Paul Fildes, and included David Henderson, Donald Woods, O.G. Sutton and W.R Lane. At a later date the team was increased to about fifty scientists, all of whom were doctors who were familiar with bacterial chemistry.

While one team developed the bacteria cultures, anthrax, plague etc. the others were preparing ways of transporting these cultures. All types of containers were tested including metal drums; similar to milk churns and glass Carboys in a metal frame packed with straw. A site had to be found to test these weapons. One site that was considered was the Island of Gruniard off the northwest coast of Scotland. Gruniard, one and a half miles long, a mile wide and three hundred feet high, lies in its own well protected bay close to the fishing village of Aultbea.

The following is taken from the official report, "there arrived on the mainland opposite Gruniard, twenty-five scientists in civilian attire, huts were erected, they carried with them and handled great care, a set of large glass flasks". The experiments were about to begin and the first victims were to be sheep.

Beforehand Porton Downs' agents had scoured the local hillsides and paid the Crofters good prices for their highland sheep. In one of the huts, Dr Henderson prepared the weapon, a 25lb chemical bomb, 18 inches high and 6 inches in diameter, which would normally have contained mustard gas. One of the glass flasks was uncorked and a thick brown gruel, which was a slurry of anthrax spores was poured in a mound of earth. Around the mound, as measured intervals sheep were tethered in concentric circles. As the unsuspecting sheep grazed, an explosive charge was fixed to the bomb, a fuse was lit and the men retreated to the mainland.

The bomb exploded and billions of spores formed a cloud over the sheep. Gradually the cloud dispersed over the island and sea, a day later the sheep began to die and the carcasses grew steadily throughout the week. The tests proved that germs could be produced, loaded in to the bombs, exploded, without destroying the living organisms. A Wellington bomber was used to make low level runs over the island, dropping bombs and more sheep perished. After some time when the Trials finally finished, men clad in suitable protective clothing, dragged the sheep carcasses to a nearby cliff, where 1,000lbs of explosive was detonated, bringing the cliff top down burying the victims.

Notices were erected around the Island, which have been there for more than fifty years and warning signs were placed at four hundred yard intervals, stating:

Gruniard Island
This Island is Government Property
Under experiment
The ground is contaminated
With anthrax and dangerous
Landing is prohibited

If the programme for chemical and biological warfare had become a reality, the bombs used would have been 500lb cluster bombs, each carrying 100 x 4lb bomblets filled with anthrax spores. Following the Island of Gruniard Bomb programme, attention was concentrated on other methods of delivering chemical and biological weapons. Shells of mustard gas were already in production and the effect on Anthrax spores in shells fired from guns would be tested. Another site was needed for these tests, because Gruniard Island was contaminated and unusable.

The official order states:

“A Trial is to take place at an isolated Cove, at Penclawdd on the North Gower Coast” and so it was in 1942 plans were supposed to test chemical and biological warfare weapons in the Burry Estuary, off the Coast of North Gower and opposite Llanelli. There was a Railway station at Penclawdd and suitable buildings were built where the shells could be filled with the germ cultures from Porton Down brought in by rail. The guns fired the shells, alternating between one week in the morning from 9am to 12 noon and one week in the afternoon. They fired according to tide times, so that fall of shot could be observed from the high ground, with the general direction of aim as being Whitford Lighthouse. When the tide ebbed and the sands were exposed the Royal Artillery would recover the shells, which were not meant to explode the unexploded shells were returned to the scientists for examination.

The purpose of the trials was to answer these crucial questions:

- 1) Did the contents of the shells leak on their flight?
- 2) Did the journey through the air create heat which destroyed the germs or cultures?

When the tests were completed production started on the gas and germ warfare weaponry and by 1945, nearly three million shells had been filled with mustard gas and a further 1.8 million bombs filled with phosgene (COCl₂) gas. Forty-one thousand tons of Mustard gas, 14 thousand tons of Phosgene, and a similar amount of tear gas was also produced for military stocks, which had been increased to maximum levels. Also following the trials at Penclawdd, a plant was established at Porton down to enable the production of Germ Warfare which included making cattle cakes, filled with Anthrax spores. 5 million cakes were produced and each one had a small hole in the centre filled with Anthrax bacteria. An outside source provided six machines which were built to make holes in the cakes and at first fifteen ladies were recruited from a Unilever soap factory who were able to pack 12,800 cattle cakes a day into boxes. Later on, twenty-five were paid £2 15s per head, the supervisor was paid £3,10s and they were all provided with free board and lodging.

Areas of Germany were selected to drop the Germ Bombs; the Province of Oldenburgh was an important Farming District containing 35 cattle per kilometre. During the war years there were many experiments on both sides and one or two scares. In 1943 large numbers of Colorado Beetles were found in Britain, on a line from Weymouth to Swansea. Potatoes were the favourite food of the Colorado Beetles and the areas where the Beetles were found were not potato producing districts. Although no containers were found; it seemed as if aircraft had dropped the Beetles.

At one time it was feared that the Doodle bugs (the V1 and V2 Rockets), which the Germans targeted on London would be filled with gas and germs. As it turned out it was the war that never was, because neither side used gas or biological weapons, not many people in Llanelli know how important the Burry Estuary was in its role as a testing ground for these non

conventional weapons. After the War many famous had their say, Professor Fritz Haber Pioneer of Gas Warfare in Germany said the following, "In no future was will the military be able to ignore Poison Gas, it is from a higher killing". Professor Aldous Huxley, an English Academic said: "The explosion of Anthrax Bombs is hardly louder than the popping of a paper bag".

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