

## Pendeen – Ten Thousand Years of History

On first sight, the village of Pendeen seems to be a product of 19<sup>th</sup> century mining, it has in fact a long and complex history rich in archaeological and other evidence.

The first settlers arrived in the local area in the Mesolithic or Middle Stone Age [8000 – 4000 BCE]. They were nomadic, probably visiting the area in summer to hunt and fish. Evidence exists of such a settlement on the Geevor mine site. By the Neolithic or New Stone Age, there were settled communities on the coastal strip of land around Pendeen. The coast provided a rich food source and also flint beach pebbles: these were carried from other parts of the country by wave action, there being no local native sources of flint. The settlement name 'Flintshire' between Geevor and Levant is said to come from the abundance of worked flint debris which was once to be found there. The settlers also exploited the 'greenstone' at Kendijack – to make axe heads, which were traded with other areas. They built some of the imposing monuments that still remain, such as Chun Quoit and later barrows like the one to be seen at Bollowal.

The Bronze Age [4000 – 2500 BCE] saw agriculture develop. Small fields were cleared and used for crops, and stock was grazed on the uplands. Some of the field patterns from this era and from the Iron Age still survive and can be seen on the land just above the cliffs: the field boundaries at Bosigran are examples. Some archaeologists see these field walls as 'the world's oldest functioning artefacts'. The major development of the period was the development of metalworking: tin, first extracted from the beds of streams in this area and found almost nowhere else in Britain, was to revolutionise history. Mixed with copper, which also occurs naturally in the area, tin forms bronze – the first metal that was hard enough to take an edge and be made into tools and weapons. The old notion that the technology of bronze making was spread by a single population group – the so called 'Beaker Folk' - during their migrations across Europe is now discounted and historians believe that it was developed independently in areas such as Cornwall and parts of south east Europe where the two ores exist. Although there is little archaeological evidence about prehistoric metalworking, there is no doubt that the Pendeen area saw one of the most significant developments in history. Our knowledge of early metal extraction and working has increased greatly over the past two decades, and it is quite possible that significant archaeological discoveries in the Pendeen area in the future may contribute to this.

The local people traded tin mainly by sea with other western European coastal communities. The tin may have been traded as ingots, some of which have survived from the Iron Age: it has been suggested that the metal was also traded as a concentrate or powdered ore that would have been combined with copper which is found in many areas. Thus, a tin trading network may have supported an area like Orkney where a significant Bronze Age culture flourished. Trade in stone axes – seemingly for ceremonial as well as practical use – was established in neolithic times, and sea routes to Europe and other parts of Britain were well established. The tin traders carried on an ancient tradition.

Although it is doubtful that the Phoenicians came to Penwith, they had direct trade links with Britain that have been preserved in legend. For many centuries, this part of

Cornwall had better communications by sea with Spain, where the Phoenicians had established a trading colony at Cadiz, and with Ireland than with the rest of Britain.

The tin trade continued well into what is called the Iron Age [600 BCE – 43 CE] and there is some good evidence to show something of what Pendeen was like then. A 'courtyard house' similar perhaps to the ones still to be seen at Carn Euny is thought to exist at Lower Boscaswell. The 'Fogou' at Manor Farm, about which so many legends exist, also dates from this period. It has been suggested that there may have been a fortified 'cliff castle' or headland at Pendeen which was to give the village its name. There are many local examples of these structures where ramparts have been used to cut off a headland. Good examples survive locally at Bosigran and Treryn Dinas, near Treen on the south coast. The headland to the south west of where the lighthouse now stands may possibly have been a 'cliff castle' with the ramparts and ditches removed by later agriculture. The function of these 'cliff castles' is not fully understood: they do not seem practical defended sites in military terms. A suggestion is that they have some ritual significance, deriving from the close links between 'Celtic' peoples and the sea. Another suggestion is that they were well marked coastal sites which could be seen from the sea and used as navigational aids, perhaps important in a period when sailing out of sight of land must have seemed a dangerous enterprise. However, one derivation of 'Pendeen' from the Cornish language is 'a fortified place on a hill or headland'. If true, this suggests that there were conflicts between groups with wealth or interests derived from the tin trade to protect. Some of the clearly defensive Iron Age structures such as Chun Castle seem to indicate a period of instability.

The Roman conquest of Britain made little difference to this remote corner of Britain. There was little Roman settlement west of Camborne and the local people probably continued to trade tin with Europe and with the Roman Empire. The Romans were certainly aware of Britain's mineral resources and tin would have been especially valuable when their other sources – particularly in Spain – were interrupted. Roman style did have an influence and the wealthy local people built 'courtyard houses' perhaps influenced by Roman ideas. The best known of these is at Chysauster which was probably based on tin working: the unexcavated settlement at Lower Boscaswell is probably of this type.

The period after the 4<sup>th</sup> century is often known as the 'Dark Ages'. We have little evidence of what the area was like. Settlements grew up locally based on the 'churchtowns' of St. Just and Morvah, and an economy largely dependent on agriculture evolved. It is not clear how much of a part tin production played locally at the time. There is no mention of it in local Domesday records and it is possible that Dartmoor met the national need for tin. Metal working may have died out completely and been reintroduced by immigrants from overseas: it is suggested that this folk memory is preserved in the story of St. Perran.

The 'Black Death' of the 14<sup>th</sup> century reduced the population on a scale that can only be estimated. Locally, land previously used for agriculture in places like Chun Hill and Woon Gumpus is known to have reverted to moorland as the population dwindled.

By the 15<sup>th</sup> century there was some recovery. The Manor of Pendeen – the major holding of land – began to thrive. The owners were the Trenouth family who in 1475 passed the estate to 'Richard Pendyne and Agnes his wife'. There is some indication of

prosperity: Pendeen Manor was an imposing building and some of this wealth may have been generated by a revived tin industry. There was a limited but continuous demand for tin for bronze bell making throughout the medieval period, and as church building increased this grew. There is, however, little documentary evidence of it. Richard and Agnes lost their estate following Richard's capture at the Battle of Blackheath in 1499.

It is clear that by the end of the 15<sup>th</sup> century there were attempts at proper underground mining. The lodes outcropping on the cliffs and at Trewellard Common were being worked. A wooden pump barrel discovered at Wheal Hermon, near St Just in 2001 has been dated to the mid 16<sup>th</sup> century and shows that the lodes were being followed out below sea level. Because later miners reworked the same areas, archaeological evidence is difficult to assess. It is possible that some of the limited advances in mining and mineral processing techniques that took place – such as the introduction of water powered stamping machines - were as a result of the influence of German miners coming to the area. There is evidence that German operated mining and metal producing companies were buying copper ore from independent miners at St. Just and Zennor in the 1580s.

Although the large number of mining remains shows that the scale of mining had grown, the basic technology relying on water and horse power and the breaking of rock by hand did not alter greatly from the 16<sup>th</sup> to the 18<sup>th</sup> century. The workings from this period were shallow, as hoisting was difficult and pumping was rare. The workings were almost always unrecorded. All of these concerns were probably small in scale and involved little capital investment by the mine owner. The miners usually worked 'on tribute' – for a percentage share of the ore they raised – and the tools and technology were the product of the local smith.

By the end of the 18<sup>th</sup> century, mining had expanded hugely and the shape of the present village was established. Steam power meant large scale mining: the remains of engine houses for the Pendeen mines – Levant, Boscawell Downs, Wheal Hearle and others can still be seen. The mines needed workers – not just men and boys to work underground, but vast armies of women, girls and young boys to process the ore brought to surface. Despite the transport needs of the industry – especially the importing of coal to feed the steam engines – the infrastructure remained poor. Before the 1780s there was not a made road through the village, and supplies were moved on track ways by mules. Wheeled vehicles such as carts were almost unknown anywhere in Penwith before the start of the 19<sup>th</sup> century and the direct road to Penzance only dates from the 1840s.

The pattern of terraced cottages in the village and the other coastal communities was established. Many of the miners had 'crofts' where they grew crops. These enclosures can still be seen to the south west of Geevor. Some miners also fished from Boat Cove to supplement their often meagre earnings. This continued into the 20<sup>th</sup> century. The mild climate and long growing season has made Pendeen a favoured area for agriculture, which with fishing and mining formed the basis of the local economy. Many of the fine dated milestones that survive around the village record the replacement of the old packhorse tracks that were no longer sufficient for the needs of the mining industry.

The growing needs of the community were satisfied by the growth of shops, pubs and nonconformist chapels. In Pendeen, the Methodist movement, as elsewhere locally, resulted in some impressive architecture. The growth was reflected in the creation of Pendeen as a separate parish 'with 3500 souls'. The building of the church in 1852 was a real effort by the community and the skills of local people in working stone and wood – such as the lectern made by a carpenter from Levant - can still be seen in the church.

The decline of the mining industry was a complex process which is currently being re-evaluated by historians. The 'great depression' of the 1870s caused many local people to emigrate, creating the links with mining areas in other countries like Australia and South Africa that still exist. However, by the early years of the 20<sup>th</sup> century there was a marked revival: a new company was formed to work Botallack in 1908 and in 1911 the Geevor company was established on the site of a recently abandoned mine. Geevor became the mainstay of the local economy: good management, investment and the ability to locate new reserves of ore meant that it was able to survive the lean years between World War One and World War Two. The village is reputed to have had more than twenty shops during this period. Other local mines fared worse – Levant, by now owned by Geevor, finally closed in 1930, never having recovered from the man engine disaster of 1919. The former 'Men's Institute' in the village was set up to alleviate the problems caused by unemployment after Levant closed. Geevor itself was put on a 'care and maintenance' basis from 1930 to 1932 but recovered by working Coronation Lode.

The Second World War brought an increased demand for tin as supplies from Malaya were cut off: there were severe labour shortages, only partly offset by the taking on of Italian prisoners of war, some of whom were to settle permanently in the village. In the post war period Polish workers were also taken on, adding to the increasingly varied local population.

By the 1960s the mine had expanded further with housing development at Lower Boscaswell for the growing workforce. Attempts were made to locate new ore reserves – successfully in the case of Simms Lode in the former Boscaswell Downs mine, less so at Levant, where despite the great technical achievement of reclaiming a flooded mine beneath the sea, not much tin resulted. As early as 1977, the mining company had realised the potential of public interest in tin mining and had set up a 'Museum and Tourist Amenity Area' around Wethered Shaft.

The collapse of tin prices in 1985 and the final closure of Geevor in 1991 had major effects on a community which had once regarded the mine as 'the Great Provider'. By this time, only one other mine – South Crofty – was working in Cornwall, and Geevor men found mining work in areas as varied as the Channel Tunnel and the Sudan. Agriculture also changed: mechanisation meant that fewer workers were needed and structural changes saw the end of many of the smaller farms around the village as they were absorbed into larger holdings. A small industrial estate was built as a palliative to local economic problems, but made little overall difference. In recent years, the village has become more popular as a retirement area, bringing new problems such as the shortage of affordable housing.

Despite – or maybe because of - a long and sometimes turbulent history, Pendeen retains a very strong sense of community and individuality. It is an area where the past never seems far away.