



Delve Deeper Audio Trail Two Count House and Coast: Botallack

If you wish to find out more about these mines then a visit to the Counthouse, Botallack, is recommended. If you wish to delve deeper into the history of Botallack Mine then this short guide will provide you with more information.

Botallack and Cornish Mining

Between 1700 and 1914, the metal mining industry of Cornwall and west Devon transformed the landscape. It fed the Industrial Revolution in Britain and influenced the development of our modern world.

The Cornwall and west Devon mining landscape consists of ten areas with distinct personalities. Botallack is in the St Just Mining District, which is in the western most part of the Cornish Mining World Heritage Site.

World Heritage Site status recognises the importance on a global scale of Cornish mining's historic landscapes, its outstanding mine buildings and other features.

Cornish miners and engineers developed technologies which transformed mining worldwide. Their innovations and skills were vital to the Industrial Revolution and helped shape our modern industrial society.



Botallack Mine

Botallack Mine, just over a mile north of St. Just, is one of Cornwall's most painted and photographed mines. It has been visited by British royalty twice: the Duke and Duchess of Cornwall (also called the Prince and Princess of Wales, later King Edward VII and Queen Alexandra) in 1865 and Queen Elizabeth II in 1980; the French Prince de Joinville also visited in 1852.

Botallack is an ancient group of mines formerly worked for tin, copper, arsenic and a few other, rare, minerals. One of the earliest references to copper mining in Cornwall, at the "Cudnareeve Work in Botallack", dates back to 1587 and the Elizabethan Company of Mines Royal. Around 1590 the historian John Norden wrote of Botallack *...a little hamlet on the coaste of Irishe sea most visited with tanners, where they lodge and feede, being nere theyre mynes."*

Photo: Barry Gamble/CCC



The concrete remains of Botallack's 1906 tin mill, photographed from the top of the old stamps engine stack (1860) later re-used by the arsenic works.

Audio Point 2

The layout of the mill downslope from right to left is clear: cast concrete loadings for the 40-head battery of Californian stamps; rectangular tables floor (centre right) which housed Buss shaking tables; Frue vanner house (centre left); and the tin floor which contained concave and convex buddles, round frame, shaking tables and kieves. A Brunton calciner (bottom left) roasted the vanner concentrates before final concentration. This north-easterly view also shows the 1980s steel headframe and 1908 horizontal winder stack at Allen's Shaft (sunk 1906-1914).

Photo: Barry Gamble/CCC



Aerial view of The Crowns. Audio point 4

The Crowns' engine houses of Botallack Mine dramatically perched on Crowns Rocks, Botallack Head. The lower engine house was built in 1835 to house a 30-inch Harvey's of Hayle pumping engine serving Engine Shaft; the ruined walls of its boiler house can be seen at the rear (seaward) of the house. The higher engine house contained the all-enclosed Pearce's 24-inch whim to serve the Boscawen Diagonal Shaft (in the cliffside just left of centre) in 1862; the walls of its boiler house can be seen to the right of the engine house with a steeply inclined flue coursing halfway up the cliff where it formerly terminated in a stack.

In the early 18th century a deep adit was driven to cut the Corpus Christi Lode and mines later included within Botallack, such as Wheal Cock and the Crowns, were working beneath the Atlantic by the latter part of the 18th century. Wheal Chicken, Wheal Hen and Carnyorth and Parknoweth mines, the latter two inland and rich in tin, were added to the group. Steven Harvey James became the mine's famous purser in 1836 and in 1842 a discovery of rich copper ore was made in the 85 fathom level on Crowns Lode, extending out under the sea. This lode was the principal copper producing lode of the mine, but was notoriously bunched. 7,200 tons of copper ore were produced in 1842-1845 worth £74,000, at a profit of £44,000. This bunch then failed and it was largely tin from the inland parts of the mine that kept the mine going for the next 50 years, its peak production being in the 1860s.



Remains of the Crown's Whim.

The principal scant remains of Crowns whim comprise this truncated granite-rubble chimney stack, a landmark no less on Botallack Head. The former engine hoisted ore discharged from Boscawen Incline Shaft up a very steep skip road, or inclined tramroad cut into the cliff to cliff-top dressing floors where it also powered Cornish rolls for crushing copper ore.

In 1863 Boscawen Diagonal Shaft was the scene of a tragic accident. The shaft, named after Lord Falmouth (Botallack's mineral lord), reached out under the Atlantic to a distance of 800 yards from the cliffs. Miners descended by a wheeled cart known as a gig and eight men and a boy were killed in the shaft when the gig chain broke.

Wheal Owles, West Wheal Owles and Wheal Edward, St Just Mining District. Audio Points 5 & 6

The remains of Wheal Owles – pronounced as 'Wheal Alls' (Owles = cliff) , around 1 mile NNW of St Just, include several engine houses and their context of shafts, burrows, ore floors and ancillary structures set in a glorious coastal setting.

It was re-started around 1810 and again in 1834 as an amalgamation of 18th and 19th century mines including Wheal Boys and Wheal Grouse (in 1837), Parknoweth (in 1857), Wheal Drea (in 1859), Wheal Edward (in 1863) and Cargodna (or West Wheal Owles, in 1870). The mine was run by the Boyns dynasty of mine managers; first by John and later by Richard, his nephew, who became its famous purser and manager 1855-1893. The Owles group produced large quantities of black tin until the mid-1880s when production halved due to falling ore grades and tin prices. The workforce of 221 in 1880 reduced to 110 by 1887. Ores of copper, arsenic, bismuth and uranium are also recorded.



Wheal Owles. Audio Point 5

One of the single most prominent landmarks in the St Just area is the lone pumping engine house of Wheal Owles, amid burrows on elevated ground just west of Truthwall. It was built in 1857 for a 36-inch engine which pumped from Engine Shaft, sunk on the north-west trending Wheal Owles Lode hosted in the granite, inland, section of the mine. Nearby are the former couthouse, smithy and stables.



West Wheal Owles.

View north to the 36-inch pumping-engine house of West Wheal Owles, also known as Cargodna. During the latter years of Wheal Owles, tin output was raised almost solely from this seaward section of Wheal Owles; until the notorious disaster of 1893 closed the mine.

Wheal Edward. Audio Point 6

This rotative beam engine house is best-known as Wheal Edward stamps. It drove 32 heads of Cornish stamps in the 1880s and the bluebells are growing in the remains of a 50-foot diameter convex buddle, Cornwall's biggest and Captain Boyns' pride of the mine's tin floors. Again, extensive, though overgrown remains of these floors may be found extending for 120 yards south-west of the engine house. After Wheal Owles closed, Botallack took up a lease of the mine but the principal work involved merely a few miners doing a little prospecting above water level for the uranium ore pitchblende (the mine is still known for its rare uranium minerals). One cask of pitchblende, showing good values for radium, was sent to Mme. Currie's laboratory in France. Atomic research in the 1950s drew further attention to Wheal Edward when some pitchblende was recovered.

