

BRITISH MINING No.79

CAPE CORNWALL MINE

by

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For Fred Jones

2 May 1951 - 31 March 2006

*And we feel those flickering moments
Like silk, they're the flags of our days
And the past is only the part of life
We've thrown away*

All Things Must Change, Calum and Rory Macdonald



Fontispiece: Cape Cornwall seen from the south side of Priest Cove. Brisons Veor is below the stack and the count house is to its right. At the right-hand side are the remains of the vinery.

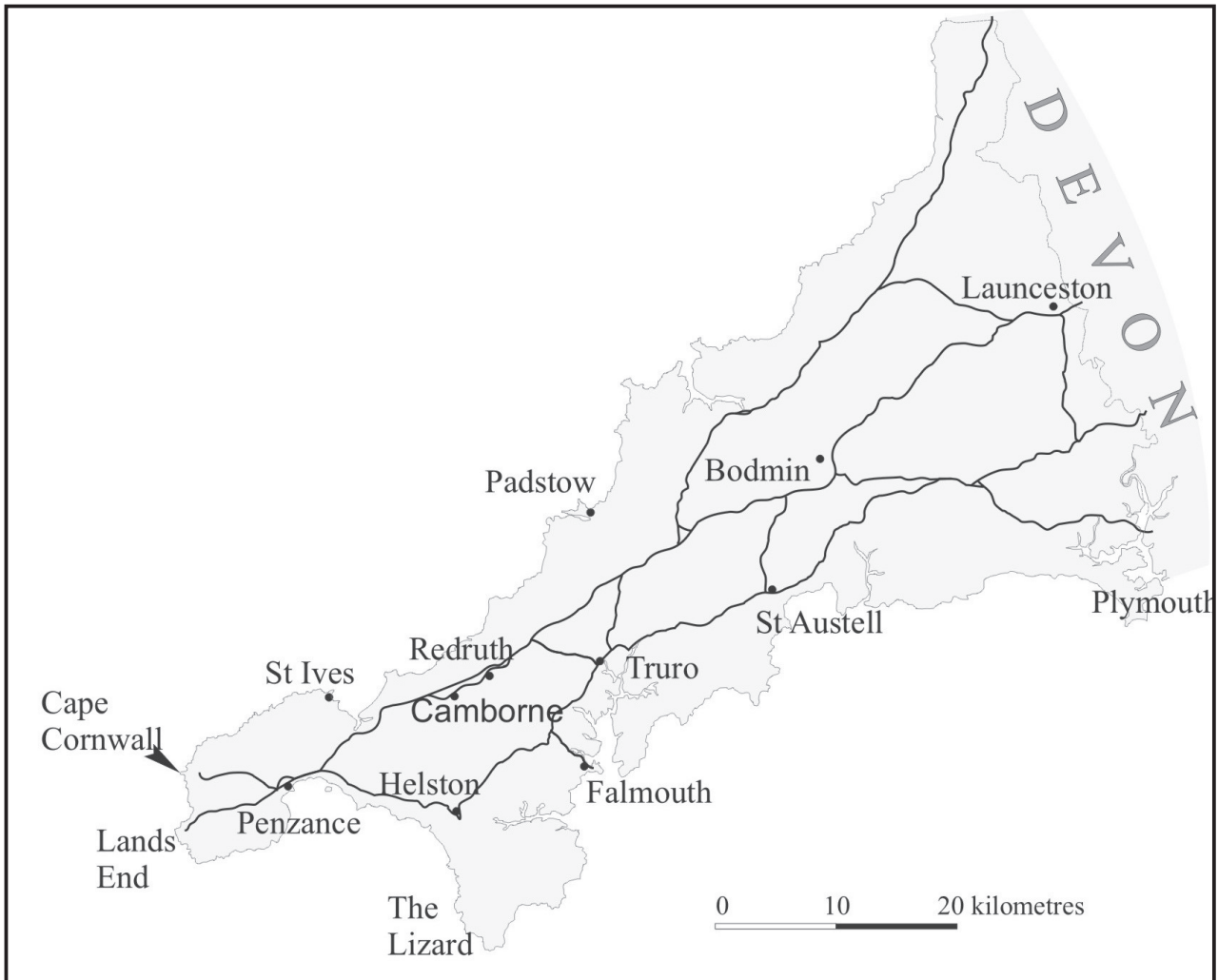


Figure 1. The location of Cape Cornwall in Cornwall.

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My thanks to Geoff and Elaine Noble and the various members of the Trevithick Society who have walked the site with me (especially those that survived the great storm on Ballowall Common in January 1999) for listening to my ideas and commenting on them. Geoff also accompanied me into the adit on the north side of the Cape. I would also like to thank Alison Hodge and St Just Town Council for permission to use their images and the previous owner of the count house (whose name I never learned) for permission to photograph the building in 2002. Lastly, my thanks go to John Hunter for commenting on my earlier manuscript.

INTRODUCTION

One of Cornwall's smallest mines but certainly one of its more attractively situated, Cape Cornwall Mine occupies the entire promontory of Cape Cornwall, England and Cornwall's only cape, one mile west of the town of St Just-in-Penwith. The mine operated three times between the 1836 and 1886, twice on its own account but most recently as part of the last St Just United Mine. Virtually nothing now remains of this once busy site, and the many visitors who flock here every year may be forgiven for missing not only Cape Cornwall Mine but the even more built-up St Just United Mine above the south side of Priest Cove. In fact, until the early 1900s, no less than five engine houses, along with boiler houses, dressing floors and many other structures could be seen around the cove, these structures subsequently being demolished to provide a local source of stone for a new (and very large) family house for Francis Oats on his return from South Africa. For some reason the mine was never perceived as being as romantic as its neighbour Botallack and as a consequence it is less well known and less well documented.

Cape Cornwall Mine can never be regarded as one of the Duchy's most successful operations; it only ever made a profit from uncalled capital and its productivity can only be described as low. However, it tells us much about 19th century Cornish mining and provides a little microcosm describing the hopes, aspirations and ambitions of Cornish mining and the reality of reopening an exhausted mine because of rising tin prices and local fairy tales.

Ironically the Cape and therefore the mine, owes its name to an error: a cape is defined as the point of land where two bodies of water meet. Until the time of the first Ordnance Survey about 200 years ago it was thought that Cape Cornwall was the most westerly point in Cornwall and hence where the English Channel officially met the Bristol Channel. Following that first survey it was discovered that Lands End held this position although it was never given the title of 'cape'.

The Cape has been used for a very long time: a Bronze Age barrow cemetery was reported in the 19th century and ditches forming one side of a possibly Iron Age cliff castle cross its neck. Cists examined have produced pottery dated at Late Bronze Age. The presence of two cliff castles of similar ages in the area (the other being Kenidjack Castle on the other side of Porthledden) may be a measure of the area's importance; evidence of metal working in the form of pewter has been found at Kenidjack. The Tinner's Way is an ancient trackway which runs from the Cape, over the high moors, to St Ives.

On the neck of the Cape can be seen the remains of St Helen's Oratory, a medieval chapel built to replace a 6th century church. What may be the font from this building is now housed in the porch of St Just church.

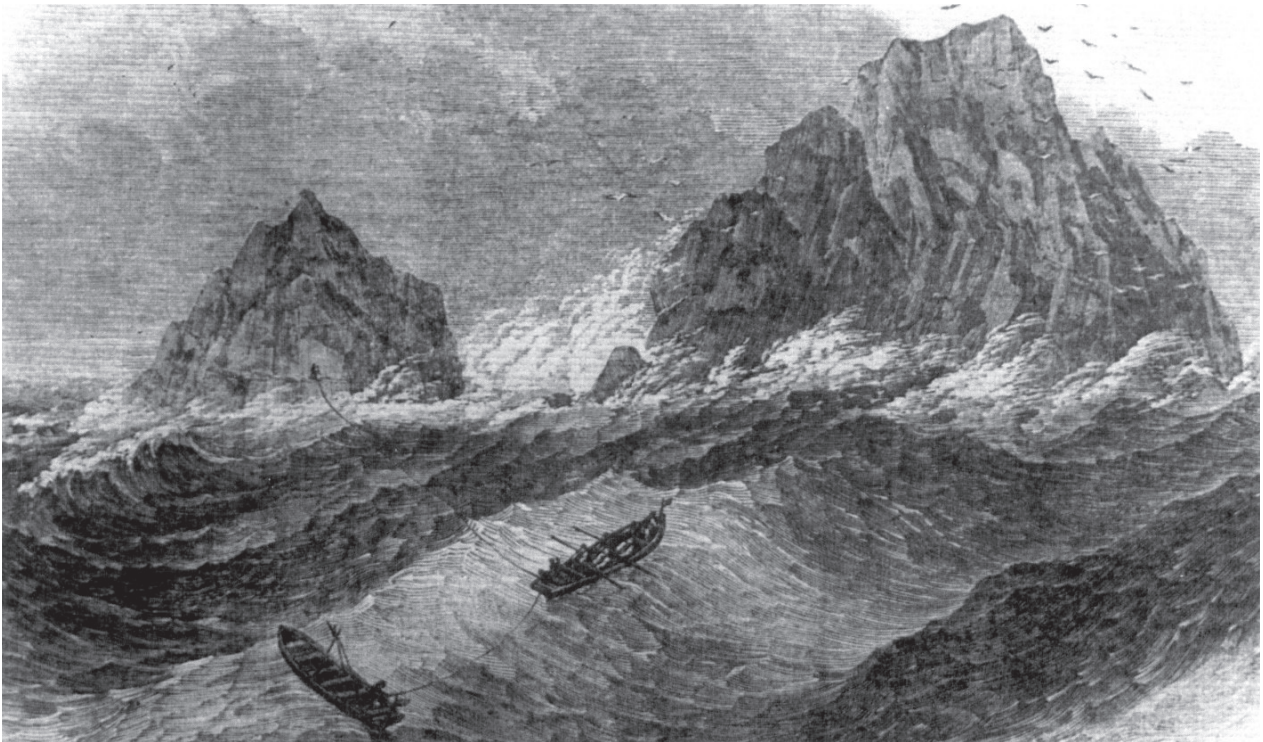


Figure 2. The rescue of the Captain of the New Commercial and his wife from the Brissons, as depicted by the Illustrated London News. A figure can be seen holding on to a line (launched by rocket) near the base of the left-hand rock.

Cape Cornwall was always a popular place to visit on Midsummer Day, with groups of young and old picnicking on the cliffs above Priest Cove and many taking trips around the Brisons. The Cape Games are held each summer, essentially a swimming race from the Brisons to Priest Cove. The little cove sheltered by the Cape also preserved the connection between miner and fisherman, with many miners keeping boats here for use during the summer months. The place is just as popular nowadays, although perhaps more with tourists from out of the county, while local fishermen and crabbers still keep small boats in the cove.

During the early part of the 19th century a boat was kept at the Cape for ‘the sole purpose of attending on the Longships Lighthouse’. The agent then was Nicholas Boyns, who also oversaw the men who worked the boat. The original capstan was installed in Priest Cove to winch this boat up the beach.

The Cape and the surrounding rocks have, however, meant that the area has been dangerous to those using the sea, even though the coves to the north and south provide some shelter. The littering of the shoals with wrecks demonstrates that the coastline can surprise even the most experienced of skippers. One of the most famous wrecks was that of the 250-ton Whitby-built brig New Commercial, which

ran onto the Brisons during a gale on 11 January 1851. The entire crew, except for a mulatto cook, who escaped astride a spar and the captain was lost. The captain and his wife were marooned overnight on the Brisons; however the wife was drowned near the very end of the rescue and was buried at Sennen church. It was this wreck that caused a six-oared lifeboat to be stationed at Sennen. For their bravery, Captain George Davies, RN, of the Penzance Coastguard and Mr Forward, of HM Revenue cutter *Sylvia*, were both awarded the RNLi Gold Medal.

The report by the Cornwall Archaeological Unit (now the Historic Environment Service of Cornwall County Council) on the St Just mining district states: ‘there is, for the general public, little archaeology left to see at Cape Cornwall’, and in many respects this might be considered a site for the ‘specialist’ in industrial archaeology. However, there is still a good deal left for those with eyes to see and, hopefully, this work will aid others to walk the site with more open eyes.

Note: Throughout this account, the name Priest Cove is used in favour of the name Priests Cove, given on the Ordnance Survey maps. The name is derived from the Cornish *Porth Just* or *Por’ Eust*, for (St) Just’s port or cove; there is no connection between this place and the clergy. The name ‘Brisons’ is alleged to originate from the Cornish *brissen*, for prison, from the days when, so it is said, the rocks were used as a prison for persistent criminals.

Second note: Both imperial and metric measurements are used in this account, the former in contemporary reports and the latter from modern surveying by the author.

HISTORY OF PREVIOUS RESEARCH

As previously noted, this is a small mine and not significant within Cornwall or even the St Just district; it has thus not attracted much attention from recorders of Cornish mining history and mines. Thomas Spargo¹ gave a brief résumé of Cape Cornwall Mine in 1866. The outline includes information regarding share prices, the mine's management and the number of people employed. Dines² gives a description of the mine based on the plans now held at the Cornwall Record Office, Truro, and also its production; these plans have been added to since then. Barton³ refers to the mine three times, but provides little information owing to it being a minor player in the history of Cornish mining.

The first 'major' item on the mine is that written by Cyril Noall in 1972.⁴ Noall was the first author to produce any sort of in-depth study of the St Just mining district, on which many later accounts have been based. Unfortunately, many of the statements included in these works are not referenced, and consequently it is not possible to verify many of them. Von Arx's 1991 paper⁵ adds a little new material from unreferenced company records.

The 1993 report on the St Just mining district by the Cornwall Archaeological Unit⁶ devotes over six A4 pages to Cape Cornwall and includes aspects other than the mining history. While some additional information is included mostly from Kenneth Brown, little if any original literature research appears to have been carried out owing to the time constraints placed upon such projects and information from previous sources has been taken at face value. However, this does include the first industrial archaeological audit of the site and an attempt to produce a chronology of the structures which have been built there. Another 1993 publication which covered Cape Cornwall was 'A View from Carn Galver' by Bob Acton.⁷

Apart from the incautious statement that the mine worked as Cape Cornwall Mine from 1836 and 'intermittently and sometimes under different names' until 1875, the work mostly confines itself to a description of what can be seen on the ground, aided by quotes from the work by the Cornwall Archaeological Unit (reference 6 below).

The most recent work is that by Acton and Brown from 2001.⁸ This includes more information on the engines and buildings on the site although there are some inaccuracies. In addition, like the Cornwall Archaeological Unit, they have taken information from Cyril Noall at face value.

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GEOLOGY

Geologically, Cape Cornwall Mine is located within banded slates, locally known as 'killas', of probable Lower Devonian Age (about 400 million years old).¹ The killas contains volcanic rocks (sometimes referred to as greenstones) and are cut by elvan dykes and quartz veins. These rocks represent an area of deep water, into which very fine-grained sediments were deposited, occasionally disturbed by basalts from erupting volcanoes. In places the killas is very badly deformed. The rocks underwent folding during the Variscan Orogeny as well as regional metamorphism. In some places there are numerous quartz veins, ranging from a few millimetres to several centimetres and varying from simple, straight-sided veins through an echelon groups to heavily convoluted masses.

The volcanic rocks are extremely hard, and made hand-drilling a very difficult and laborious task. The Brisons are made of these volcanic rocks, and there is a reef of the same material (known as The Bridges) extending south-south-east towards Gribba Point.

Between 300-250 million years ago a series of granite masses was intruded into the Devonian rocks as a result of plate tectonic activity. These igneous rocks extend the length of the south-west peninsula from Dartmoor to the Scillies and beyond, although they are not exposed everywhere.

The contact between the granite and the killas in Priest Cove is Saveall's Lode, the north-western end of which is Cape Cornwall Lode, which faults it to the east by about 200m and to the north by a lesser but unknown amount. The true contact can be seen underground in adits both north and south of the Cape and can also be traced across Porthledden. The granite was entered at the 90 and 100 fathom levels south-east of Cape Cornwall Engine Shaft, along the strike of Cape Cornwall Lode; it was not found to the north of the Cape although it doubtless exists at greater depth here. Around the lodes this rock tends to be altered and weakened, thus making it easier for hand drilling. The intrusion of the granite into the surrounding rocks has thermally metamorphosed them – they have been altered by the heat of the granite.

The Lands End granite has been dated at 268 +/- 2 million years² although this date is regarded as anomalous, the actual age being around 280 million years. No mechanism has been cited for the erroneous date although Darbyshire and Shepard³ regard it as having been caused by a major hydrothermal event, possibly one associated with mineralisation. The granite seen in Priest Cove is a fairly homogeneous medium-grained variety, cut by tourmaline, greisen and pegmatite veins with areas of pegmatitic development of the feldspars. At Geevor Tin Mine a number of granite sheets have been recorded⁴ and the British Geological Survey has sub-divided the granite into different types on the basis of its texture, implying that there is a gradation from one to another.⁵ However this appears rather simplistic when the area is looked at in detail and many of the textural variations appear to be due to the presence of a

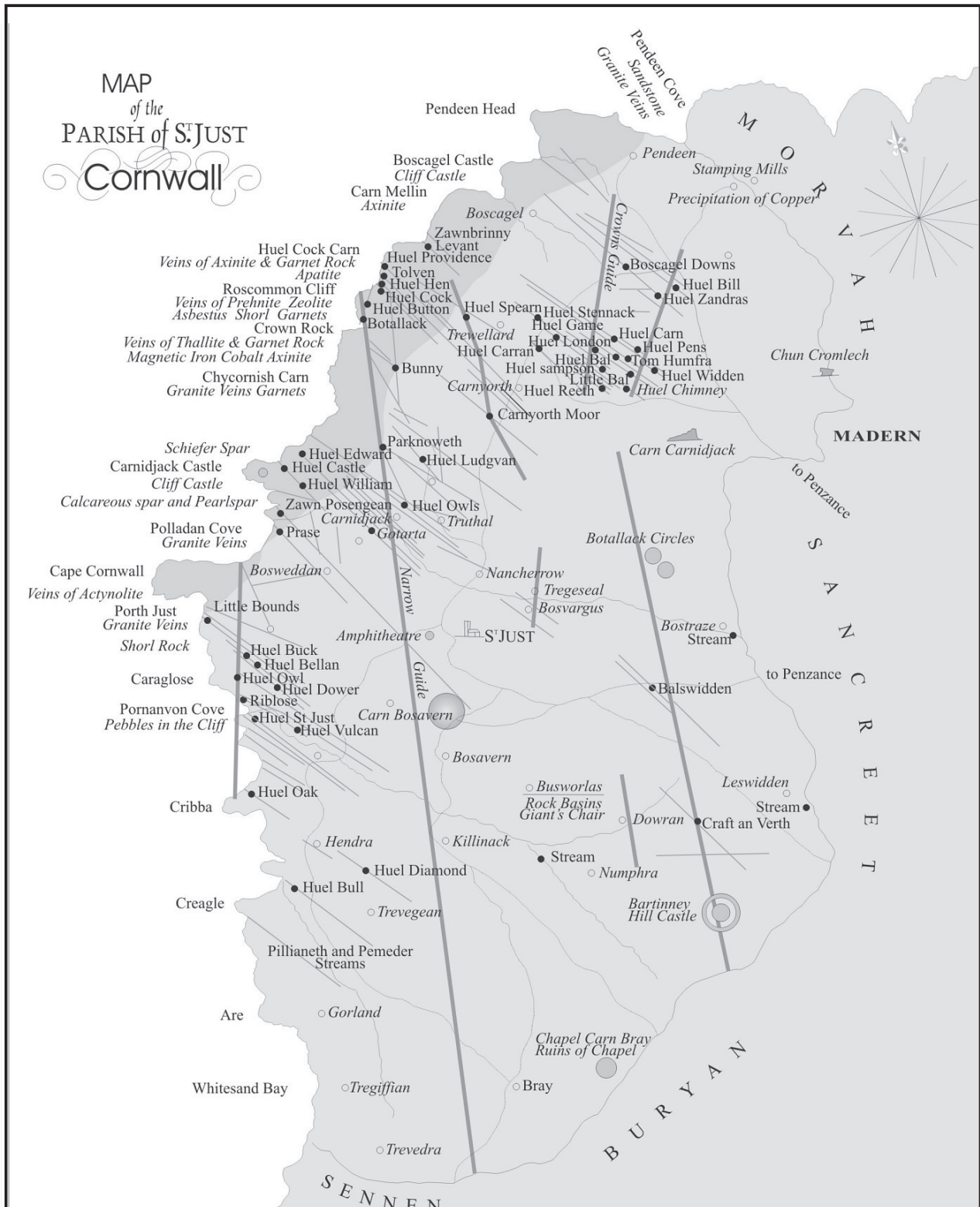


Figure 3. The very first geological map of the St Just mining district, published in 1822. The map gives an idea of the lodes which converge on Cape Cornwall. Levant and Botallack Mines are indicated but virtually nothing is shown of the future Geevor Tin Mine except for a few minor workings one of which is Wheal Stennack; the name 'Geevor' allegedly derives from 'stennack-an-gever' or 'goat's tin ground'. (Map redrawn from Joseph Carne, Transactions of the Royal Geological Society of Cornwall Volume. 1, 1822).