

cornish mining

newsletter of the Cornwall & West Devon Mining World Heritage Site

Autumn 2008

Smokin' Chimneys

Geevor Hard
Rock Museum

Bull Engine
restoration

Morwellham
becomes first
Key Centre

Cultural Events
Programme

Smokin' Chimneys at Wheal Basset
Stamps and West Basset (foreground)

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'Smokin' Chimneys'

The area adjoining the southern slopes of Carn Brea became a major focus of tin production after the discovery of the Great Flat Lode in 1870. So named due to the unusually flat angle of the ore body here, the lode extended for some three miles from Wheal Uny in the east to South Condurrow in the west. Many individual mines were to work the lode over the coming forty years with many steam beam engines employed for pumping, hauling and stamping duties. Many of the engine houses survived the closure of the mines here and together these constitute the largest concentration of such structures anywhere on earth.

The Mineral Tramways Heritage Project has been celebrating this remarkable heritage by establishing an extensive network of multi-use public trails. Reusing former mineral tramway and railway routes through the Great Flat Lode, the Mineral Tramways Trails connect this amazing mining landscape to the mineral ports of Portreath and Devoran, on the north and south coasts respectively.

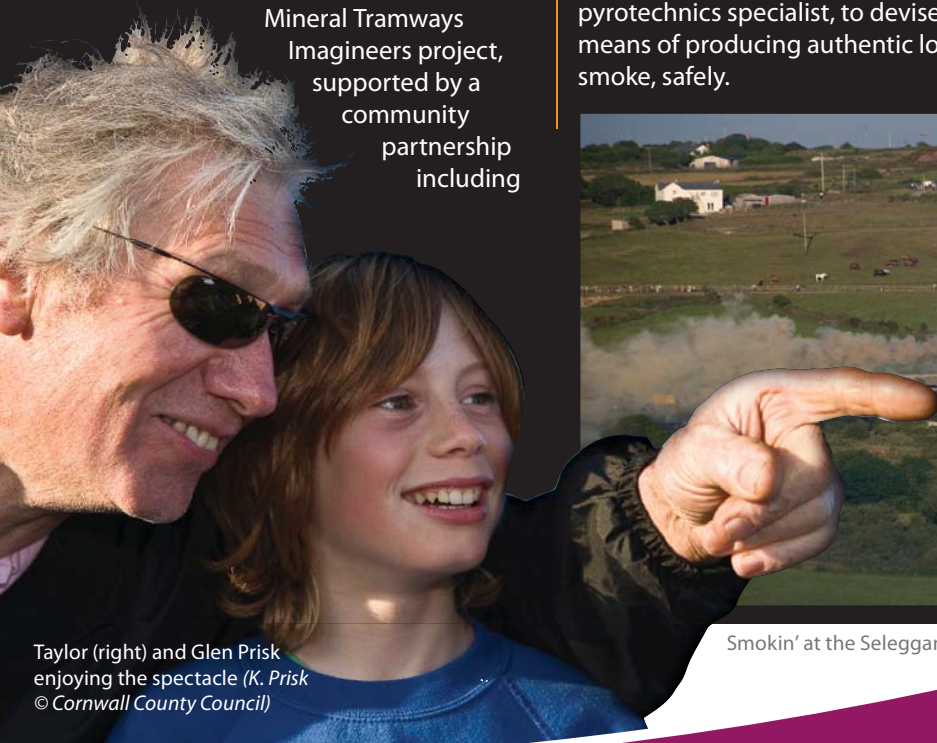
During the planning of events for the recent Mineral Tramways Imagineers project, supported by a community partnership including

The National Trust and the Cornish Mining World Heritage Site, it became clear that there was a strong public desire to see the chimneys along the Great Flat Lode smoking again. In the latter nineteenth century this landscape would have appeared vastly different with each of the many chimneys in either constant or regular use. The Imagineers team, headed by Antony Waller, recruited the artist John Keys, who specializes in the staging of various landscape events, to deliver the re-creation and John Voogd, a pyrotechnics specialist, to devise a means of producing authentic looking smoke, safely.



The two Johns were joined by Kingsley Rickard, Mark Kazcmarek, Tony Brooks and Gavin Henderson, who kindly gave of their considerable mining, engineering and environmental knowledge to ensure the event ran smoothly.

After undertaking trials it was found that the controlled burning of damp straw or hay was the preferred method of producing suitably dense smoke.



Smokin' at the Seleggan Tin Smelter

Taylor (right) and Glen Prisk enjoying the spectacle (K. Prisk © Cornwall County Council)

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... 'Smokin' Chimneys'

The call then went out for fifty willing volunteers to work in pairs manning the chimneys on the chosen day of the event, Monday 30th June. The response from the local communities was excellent and the evening saw the volunteers assembling at King Edward Mine, Troon, for a briefing session in advance of their departure to their allotted chimneys.

Soon crowds gathered along the length of the Great Flat Lode eager to see a spectacle which would have

Right: Choir at King Edward Mine

Below: The first chimney to emit smoke at Wheal Grenville



been commonplace in the late 1800s. Many flocked to the summit of Carn Brea, clustering around the granite tors which cap the hill.

Choirs performed at King Edward Mine and Carn Brea leading up to the time of event helping to create a real festival atmosphere. At 8.15 pm the first of the chimneys, at Grenville United Mines, was seen emitting smoke.

It was soon joined by others at pre-determined intervals until twenty-one could be seen across the landscape, echoing the intense industrial activity which took place here during the latter nineteenth century.

The organisers were thrilled by the amazing public response which saw five thousand people including BBC and ITV local television crews turning up to witness the momentous event. Deborah Boden, the Cornish Mining World Heritage Site Co-ordinator, commented that the sight was spectacular and duly highlighted the importance of the Cornish mining landscapes which, following UNESCO inscription in 2006, "...are now on a par with the Pyramids, the Great Wall of China, and Stonehenge." 'Mine Traveller', the World Heritage Site travelling exhibit for young people, was also on site at King Edward, offering an impression of mining life underground.

Imagineers is a Mineral Tramways Heritage Project (2005-8) initiative in partnership with the first National Trust Unlocked project, Kerrier District Council, Kernow Education Arts Partnership, Hi8us Cornwall, The Works, and King Edward Mine. It celebrates and encourages community participation in the mining trails network and The National Trust's Cornish Mines and Engines site at Pool. Working with fifteen local schools, colleges, youth and community groups, the project aims to involve young people in reflecting on Cornwall's mining heritage in order to stimulate thinking about Cornwall's economic and cultural future.

For further information, please see:
www.antonywaller.com/imagineers.html

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Geevor Hard Rock Museum

After much careful planning and hard work the new museum of Hard Rock at Geevor Tin Mine, Pendeen, is now open to the public. This is part of a £3.8 million project funded by the Heritage Lottery Fund, Objective One, Cornwall County Council, Penwith District Council and The National Trust to conserve the twenty main buildings which comprise the mine (see the article in our autumn 2007 newsletter). The Hard Rock Museum has been installed within the former Top Fitting Shop of the mine with the interpretation materials being designed and produced through a partnership of Geevor Mine staff and Gendall Design, Falmouth.

An artist's impression of Geevor's new museum prepared at the concept stage. (© Cornwall County Council)



The museum is set out on two levels with the ground floor reflecting the underground environment of the mine with a life-size re-creation of a stope where ore was extracted. Contrastingly, the first floor has a lighter feel of being at surface or 'grass', with interpretation covering the geology and mineralogy of the area, and also the social history of the mine and West Penwith.

To mark the completion of this important project there will be a free open day on Saturday 11th October and a grand opening ceremony to be performed by Mrs Winnie Sevier. Winnie's association with the mine extends back to 1920 when her father, Frederick Charles Cann, took over as Mine Manager, to be succeeded by her husband, W. E. Sevier, in the role of Acting Manager in 1936.

The Cornish Mining World Heritage Site Team wishes Geevor every success with the new museum development which is sure to be a huge hit with visitors of all ages.

For further information regarding Geevor Tin Mine, please log on to: www.geevor.com



Left: The steel winding headframe atop Victory Shaft sunk in 1919.

Above: The Geevor Tin Mine complex from the air, part of the World Heritage Site and a Scheduled Monument. (A. Cocks © Cornwall County Council)

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Restored Bull Engine at Kew Bridge Steam Museum

The 12th May 2008 saw the official press launch of the newly restored Bull Engine at the Kew Bridge Steam Museum in Middlesex.

Part of a wider collection of steam engines here, it was constructed for the Grand Junction Water Works Company c.1856 by Harvey's Foundry, Hayle, to a modified design originally conceived by the Cornish engineer Edward Bull (1758-1798). With a cylinder diameter of 70 inches (1.78m) the Bull Engine is the largest direct-acting engine (without beam) in existence and the only one remaining in its original location. It originally formed part of a larger scheme to deliver water to the then new pumping station at Campden Hill, near Notting Hill Gate.



The massive iron beam of the Grand Junction 90 inch engine, constructed at the Copperhouse Foundry, Hayle in 1846

The engine's operational life continued well into the twentieth century not being decommissioned until after the introduction of electric and diesel powered pumping sets in 1944. Fortunately the engine was to be retained on site, however, along with four of the original six steam engines due to the far-sighted view to establish a museum dedicated to the history of London's water supply.

The Kew Bridge Engines Trust was eventually to be formed in 1973 and commenced a programme to restore the five steam engines in situ, these being: the Boulton & Watt Engine, the

Clockwise from right: The cylinder cover and casing – now as good as new; The landmark water-standpipe tower at Kew Bridge Pumping Station, home of Kew Steam Museum; Guests mingle in the Steam Hall of the museum prior to the event



Maudsley Engine, the Grand Junction 90 inch, the 100 inch Engine, and the Bull Engine. Though the first two in this list were not built in Cornwall they nevertheless operate on the Cornish cycle using high-pressure steam. While three of these engines were restored during the 1970s and 1980s, it was not until 1999 that the Bull Engine Restoration Committee was established to take things further.

Restoration work was to commence in 2001 following grants received from Heritage Lottery and Prism funds, and through the aid of generous private donations. The £45,000 received in total enabled the clearing out of much debris and silt from the sump below the engine cylinder, the refurbishing of the many tons of iron and bright-work constituting the engine itself, and careful re-assembly, the latter which itself took two years to complete. The engine underwent steam trials for the first time in November 2007 and was completed over the winter months.

On Monday 12th May a specially invited audience eagerly awaited the official start of the engine, the honour

of which went to the journalist and broadcaster, Anna Ford. At 12.00 pm the steam was applied and the engine set off in the manner of so many other days during its 85 year working life.

Congratulations are extended from the Cornish Mining World Heritage Site to Oliver Pearcey, Chair of Trustees; Nick Morgan, the Bull Engine Restoration Project Leader; and to the many individual staff and volunteers whom together gave an astonishing 7,000 man-hours to this considerable effort.

Long may this restored engine operate and, in doing so, continue to mark the outstanding contribution of Cornish engineers and foundries to the development of high-pressure steam technology.

For further information on the Kew Bridge Steam Museum, please log on to: www.kbsm.org

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Morwellham becomes 'key' to Cornish Mining interpretation

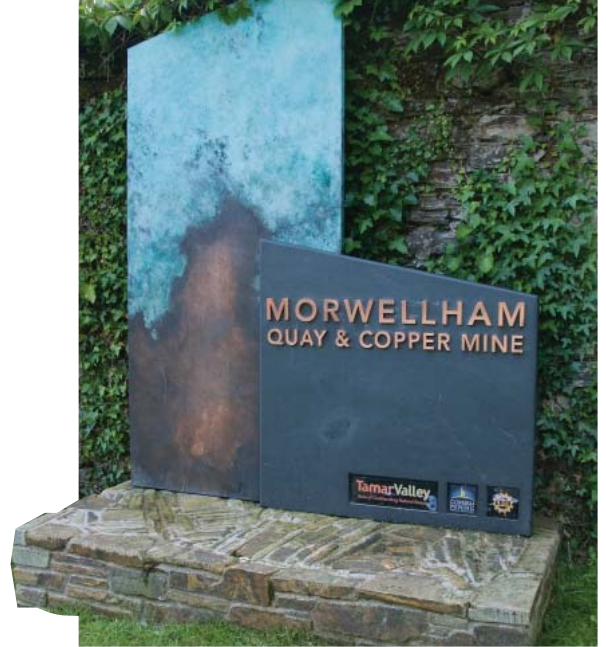
May 31st 2008 saw the historic village of Morwellham inaugurated as a 'Key Centre' for the Cornish Mining World Heritage Site (WHS), the first of three such centres intended to cover historic interpretation for Cornish Mining World Heritage. Morwellham has recently undergone a major consolidation programme as part of the Tamar Valley Mining Heritage Project, to expose and preserve historic dock-related features which are of great importance to the village and World Heritage Site.

Morwellham & quays

Morwellham, on the eastern bank of the River Tamar is first recorded as a port in 1238. Some of the earliest activities at Morwellham concerned the import of dried fish and large quantities of sea-sand the latter dredged downstream and used to counteract the natural acidity of local soils. Lime production also became an important trade for the village with limestone being shipped from quarries at Plymouth for burning, for building and agricultural use.

The port probably first became associated with metalliferous minerals during the early medieval period at which time tin produced from the rich alluvial workings within the western areas of Dartmoor were more than likely part of its trade. Morwellham, at the centre of what would become known as the Tamar Valley Mining District, was very well-placed to serve the many deep mines that would eventually operate in the area during the late eighteenth and nineteenth

centuries. Ore export at Morwellham was greatly increased by the coming of the Tavistock Canal, completed in 1816. Built by the brilliant young mining engineer and entrepreneur John Taylor (1779-1863), the Tavistock Canal was to bring many thousands of tons of copper ore to the quays from the productive mines of the Tavistock area and the western fringes of Dartmoor, particularly Wheal Friendship and Wheal Betsy.



Top: Copper entrance sign at Morwellham
Bottom: Michael Stone (left), Chair of the Morwellham and Tamar Valley Trust, receives an engraved copper plaque conferring WHS Key Centre status from Adam Paynter, Cornwall County Councillor and Environment & Heritage Portfolio Holder



Left: Guests and costumed interpreters outside Morwellham's shop

All pictures A. Cocks © Cornwall County Council

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The discovery of an immensely rich copper lode at what was to become Wheal Maria in 1844, however, was to change the fortunes of Morwellham yet further and establish it as the principal copper port on the Tamar. This mine and a number of sister producers were to come together under the name of the Devonshire Great Consolidated Mining Company (DGC) in 1846, and the company was to change the shape of the mining landscape in the Tamar Valley, eventually producing more copper ore than any other consolidated mines working in Europe. To reduce the costs of ore handling incurred through the traditional use of many pack-mule teams for transportation, a purpose-built mineral railway was constructed, completed in 1858. This brought ore trains seven kilometres south from the mines to the head of an inclined plane, some 125 metres above river level. A considerable feat of engineering, the plane joined the docks via a c.90 metre tunnel which took the rails under the Bedford Estate workers cottages which face the river. Ore from DGC and other mines soon filled the quays where it was assayed before sale and shipment. So prodigious was the ore from DGC particularly that additional wharfing capacity had to be constructed in 1859, the 'Great Dock', adjoining and upstream of the existing facilities.

Today Morwellham retains much of the buildings and associated infrastructure of this time and is understood to be the best-surviving example of a river-situated copper port in the world. Among the many features to be experienced are the restored carpenters' and blacksmiths' shops, and the cottage and laboratory of the assayer who tested and assessed parcels, or 'doles', of copper ore offered for sale. Lime kilns also face the river here along with the narrow-gauge rails and turntables used to transfer limestone and fuel to the kiln-pots for burning.



Clockwise from left: Electric mine tram with visitors approaching the George & Charlotte Mine (K. Prisk © Cornwall County Council); Overshot waterwheel formerly used to power a manganese ore-crusher at this location (A. Cocks © Cornwall County Council); Morwellham from the air showing the Great Dock (left) built for additional copper ore storage in 1859 (B. Gamble © Cornwall County Council)



Just Mining District (the far west of Cornwall), one within Cornwall's Central Mining District (Camborne/Redruth and Gwennap), with the third being that in the east to cover the Tamar Valley and Tavistock areas on the Cornwall/Devon border.

The restoration and 'Key Centre' status

Much restoration work has been undertaken recently as part of the Tamar Valley Mining Heritage Project which included the stabilisation of the facings of the Great Dock which had suffered from progressive subsidence for some time. The successful conclusion of this work and the official reopening of the dock were marked by a musical celebration event staged by the office of the Tamar Valley Area of Outstanding Natural Beauty (AONB).

'Key Centres' is a term used by the Cornish Mining WHS to describe sites which are intended to interpret the full range of WHS values and themes and act as signposts to the network of local interpretation facilities, in addition to presenting the individual site's own specific story. Interpretation planning undertaken as part of the WHS bid in 2005 outlined the most favourable approach to interpretation across the nominated Site, this being to establish three appropriately located Key Centres across the geographical spread of the WHS: one in the St

Morwellham is the first site to be instated as a Key Centre and Councillor Adam Paynter, Environment and Heritage Portfolio Holder for Cornwall County Council, was on hand to present a handsome engraved copper plaque to Michael Stone, Chair of the Morwellham and Tamar Valley Trust. The many guests invited were joined on site by Morwellham's costumed interpreters, and both the underground tour of the George & Charlotte copper mine and the WHS 'Mine Traveller' display unit were available throughout the day. The event was also an opportunity to present the World Heritage Site's new activity guide, 'Mine & Yours' to the public (featured in the spring newsletter), which has been produced to introduce young people to the rich metal-mining heritage of Cornwall and west Devon.

For further information, log on to:
www.cornishmining.org.uk;
www.morwellham-quay.co.uk;
www.tamarvalley.org.uk

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Cornish Mining Cultural Events Programme



'Cornish Lads' visit Golant

Members of the Cornwall Songwriters Collective brought their musical tribute to Cornish Mining to Golant on 7th June, the fourth date in their ten venue tour of Cornwall and Devon. Directed by musician and producer Mike O'Connor, *Cornish Lads* is a thoroughly engaging exploration of the landscapes and people which were changed by the pervasive influence of hard-rock mining, both at home and overseas. Through the skilful use of song, the risk, innovation and pride associated with metalliferous mining is brought audiences in a manner which is both emotive and inspirational.



The performance was well received by the Golant audience, which joined in for a couple of songs, the cast doing an excellent job in imparting the passion, spirit and pride which is synonymous with Cornish mining. *'Cornish Lads'* follows on from previous shows by the Songwriters Collective, *'The Cry of Tin'* and *'Unsung Heroes'*, both of which were critical and commercial successes. Susan Pellowe of *'Plays International'* praised *'The Cry of Tin'* in 2002 as "...radical theatre at its best."

For further information on the Cornwall Songwriters Collective and 'Cornish Lads', please see: www.lyngham.co.uk/cornishlads



below by **cscap**: dance company

Following on from the announcement in the previous newsletter, further performances of the extremely popular dance piece 'below' are being given by the cscap dance company. Showcasing a story by Anna Maria Murphy which explores the hidden depths of the Cornish mining industry, 'below' tells tales of life above and below ground. Using cscap's own unique style of story telling - blending dance, physical theatre, music and film - 'below' is a performance of raw energy and sheer physicality.

New works by T C Howard, Sally Williams and Helen Tiplady are also featured to create a moving and fascinating performance which conjures up an era of bal maidens, deep fathoms and faith, loss and the promise of new life. Recent performances were very warmly received with the St Eval audience in particular hailing their April 1st show as "...excellent - fantastic, entertaining, [and with an] intense ending".

Show Date	Venue Name	Start Time	Box Office
10th October	St Kew Community Hall	7.30pm	01208 841746
11th October	Perranporth Memorial Hall	7.30pm	01872 572121
16th October	South Axholme School (Yorkshire)	7.00pm	01427 872121
18th October	West Anstey Village Hall (Devon)	7.30pm	01398 341615

For further information on cscap's innovative work, please see: www.cscap.org.uk

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Cornish Mining Cultural Events Programme

Please see the News & Press page for regular updates on World Heritage Site events: www.cornishmining.org.uk

audiovoice

audiovoice is a programme of seven intensive workshop experiences designed to encourage choral singing among ten to twelve year olds. Being held at seven different National Trust properties in Cornwall and west Devon, the workshops are taking place during school holidays and weekends from February 2008 to March 2009. This Cornwall Arts Centre Trust project was funded by the Cornish Mining World Heritage Site and Youth Music, with additional support from The National Trust. It is devised and delivered by Carn to Cove, in partnership with Cornwall County Council Music Service, Plymouth Music Action Zone, and Cornwall Youth Music Action Zone (CYMAZ)

Following on from the well received performances of Mtiebi, a group of male singers and dancers from Georgia, which took place in June, the audiovoice project continues with a two-day singing and vocal workshop led by professional musicians and members of The Pearl of Africa Children's Choir.

Performing at Saltram House, the impressive National Trust property in south Devon, The Pearl of Africa Choir is made up of talented children from disadvantaged backgrounds in Uganda. The choir, comprising around twenty children aged seven to eighteen years, has been running for over twenty years and their workshops introduce children to Ugandan music, dance and culture. This choir is now not only well known in Uganda but they also have an international following in the UK and USA. They have performed at many prestigious events and locations as well as having been featured on BBC and Channel 4 TV. Typical comments after workshops and performances include "...overwhelmed by their talent and enthusiasm", "...awesome" and "...their voices, music and dancing are superb".

The schools from which the choir members come are run locally by a charitable foundation in order to house and provide schooling for orphaned and destitute children in southern Uganda. The Choir visit

the UK to raise awareness and the desperately required funds to help sustain and improve the standard of education, healthcare and living standards in their schools.

The two-day session takes place on Monday and Tuesday 27th and 28th October 2008, during Half Term, with places being free for ten to twelve year olds, school years 5, 6 and 7. Two additional places are also available for nominated Youth Leaders aged fifteen to sixteen. Places are limited and in demand so those interested in taking part are encouraged to book early to avoid disappointment. All bookings are on a first come first served basis.

Future workshop sessions are planned for next year, with the English Touring Opera at Cornish Mines & Engines, Pool (February Half Term), and Sing for Choirs with Fiona Evans at Godolphin House (TBC).



Please contact Carn to Cove for an enrolment form and to reserve a place:
Tel: 01209 313200 Email: admin@actcornwall.org.uk www.carntocove.co.uk
For details of further non-workshop performances by the choir this autumn, please see the Carn to Cove website.

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out now

'Mine & Yours'

the activity guide to the **Cornish Mining World Heritage Site**



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Come and experience the UK's largest World Heritage Site - the mines, towns and villages, ports, harbours and mineral railways which together comprise our world-class landscapes, internationally significant for mining and a culture which changed the world. See why these historic landscapes are on a par with Stonehenge and the Great Wall of China.

Where can I experience Cornish Mining?

The World Heritage Site has many exciting attractions across Cornwall and west Devon which provide high quality visitor experiences consistent with World Heritage status. Find out about all these, where to go and what to do, in "Mine and Yours", available in bookshops now. Details available via the website.

www.cornishmining.com/mineandyoures

