# Gwithian

## *Dark Age secrets from the dunes*

Charles Thomas's investigation of Gwithian was to be one of the great excavations of the 1950s and a landmark in Dark Age studies. Work on publication of the archive is in progress. Jacky Nowakowski, Senior Archaeologist at Cornwall County Council, explains the significance of the discoveries.

**Below** *General view of the Gwithian study area in 1987, showing the sand dunes, Godrevy headland and lighthouse, the mouth of the Red River, and the Hanson sand quarry. The site of the 1950s excavations is shown by the white arrow.*

PHOTOS: Steve Hartgroves for Cornwall County Council

PHOTO: C Thorpe, Gwithian archive

**Top** *Detail view of the Gwithian study area showing the site of a) the Bronze Age excavations of 1956-1961 (right arrow), and b) the Dark Age excavations of 1953-1958 (left arrow).*

**Above** *The Dark Age excavation site today – nothing more than a low grassy mound.*

Interviewed by *The Cornishman* in 1954 shortly after setting up his excavation at Gwithian, Charles Thomas, a young graduate of the Institute of Archaeology in London, explained his ambition: 'A dig such as this, systematically developed through the years, is going to provide a background to Cornish history such as has never been worked through before. We want to show what was the occupation, the life, and purpose of the gradually changing Cornish character through the centuries'.

Gwithian lies in a coastal parish in West Cornwall. The wide bay dominated by massive sand-dunes is stunningly beautiful. It is known to archaeologists for some equally stunning discoveries. As a student I remember remarkable pictures of ancient criss-cross ploughmarks immaculately preserved at this sandy site, and I learnt how the Gwithian excavations pioneered ideas about Bronze Age farming. What kick-started a field project which eventually ran for almost 20 years was the discovery of post-Roman material on the site. At Tintagel, Ralegh Radford discovered a mass of 5th and 6th century AD pottery imported from the Eastern Mediterranean. Soon the stuff was turning up all over the place, especially at royal sites in Western Britain. At Gwithian, it was eroding from the sides of a sand dune, together with a mass of local hand-made pottery.

**Above** *The Gwithian excavation team, 1954 season. Charles Thomas is seated centre flanked by Ian Cossar (left) and Bernard Wailes (right). J V S Megaw is standing extreme left.*

Rabbit burrows yielded the first evidence. In January 1953, Charles Thomas picked up shell, bone, and a few potsherds which had been kicked out of rabbit holes in the long, low, grassy dunes located less than a quarter of a mile inland from the coast within the tidal estuary of the Red River. The quantity and condition of the material looked intriguing, and so work began.

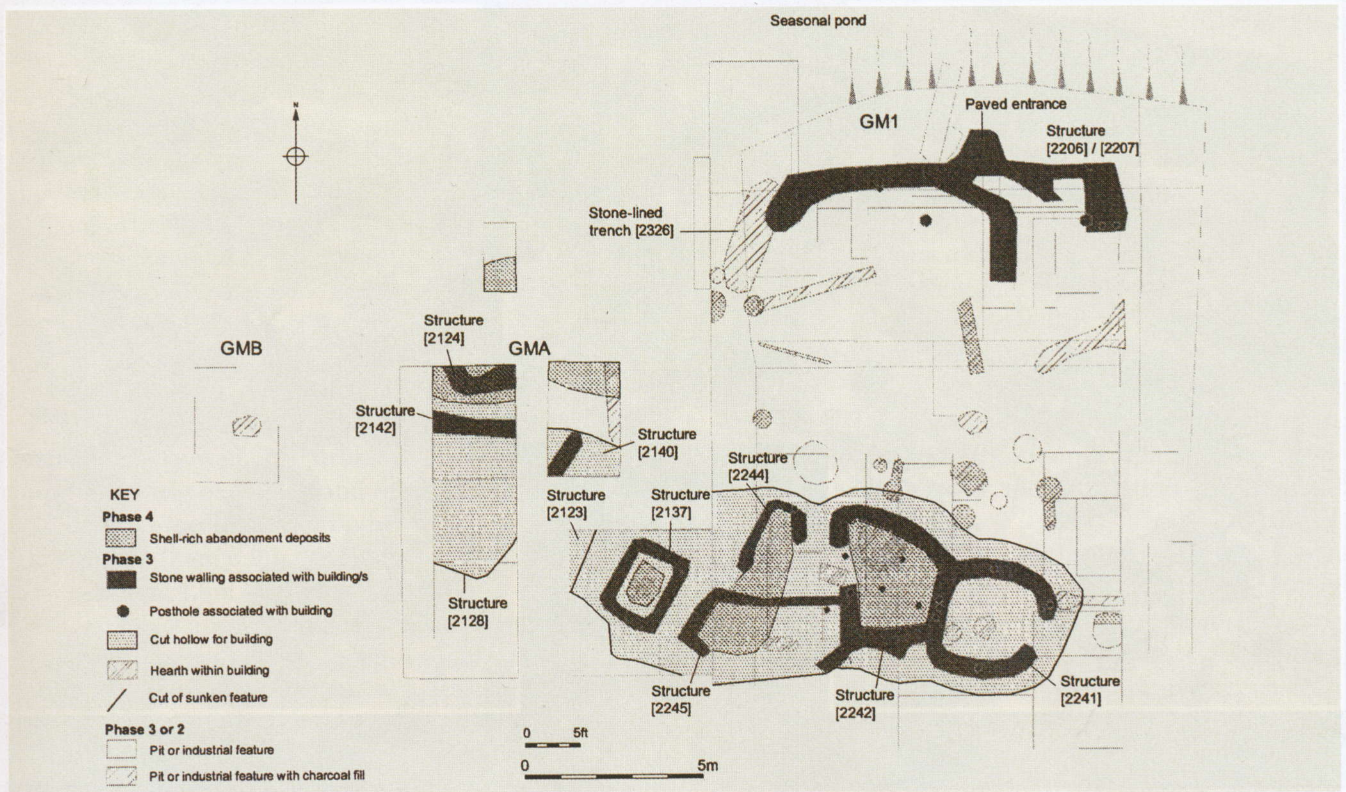
Gwithian became the scene of a major archaeological landscape project from the late 1940s into the 1960s. Over 70 sites were investigated, dating from the Mesolithic to the post-medieval periods, through excavations large and small, field surveys, and field-walking. The post-Roman site hosted a major set-piece excavation from 1953.

The Gwithian project grew under Charles Thomas's direction into a remarkable field school, where many young students learnt

**Left** *A mid-1950s excavation team in action. The distinctive character of the site – a sand dune – is immediately apparent.*

**Below** *Tea-break on site, Gwithian, 1954. The section shows the depth of the stratigraphy across the site and the reason for the exceptional preservation of the Dark Age deposits.*

PHOTO: J V S Megaw, Gwithian archive.




how to dig, record, and analyse their finds. A small museum was set up on site, and over the years Gwithian became a regular fixture in the digging calendar. As well as Thomas, many of the Gwithian team were to enjoy illustrious careers in archaeology – Peter Fowler, Vincent Megaw, Bernard Wailes, Ruth Tringham, Ian Longworth, Sonia Chadwick, David Clarke, Jeffrey May, and, not least, *Current Archaeology's* very own Andrew Selkirk (who has fond memories of camping among the dunes).

Although there were interim publications of results, full details of the three set-piece excavations – the Bronze Age sites, the post-Roman site, and the medieval manor of Crane Godrevy – have remained unpublished until now. Then, in 2003-2004, an appraisal of the entire archive led to further detailed study by the Historic Environment Service of Cornwall County Council, with funding to make available and publish the results of the excavations from the English Heritage-administered Aggregates Levy Sustainability Fund. Of particular importance has been a series of radiocarbon dates. The remains of Dark Age Gwithian that were revealed in the sand half a century ago are now finally in the process of being analysed.

## A Dark Age industrial estate

The first major dig at Gwithian was at site GMI, where a couple of trial trenches dug in the spring of 1953 struck the stone wall of a building sealed beneath deep middens and layers of wind-blown sand. A sequence of deposits survived intact. The omens were good.

Work on a much larger scale was planned for 1954, and the challenge of excavating a complex sandy site began. Over the next four years, a series of linked sites (coded GMI, GMA, GMB, GME, and GMIV) were investigated, and an

**Above** *Plan of sites GMI, GMA, and GMB, Gwithian, North Cornwall. This schematic multi-phase plan shows structures, industrial features, pits, and shell-rich abandonment deposits, all of 5th-8th century AD date.*

**Below** *Aerial photography 1950s-style. Weather balloons are prepared for overhead photography of the GMI site, Easter 1956.*

PHOTO: Brett Guthrie, Gwithian archive.

PHOTOS: Ian Cossar and J V S Megaw, Gwithian archive

**Above** *Houses 2 and 3 (Structures 2241 and 2242 respectively), Site GMI, Gwithian, 1954. These two adjoining structures were built inside the same hollow, were formed of stone, timber, and turf, and were clearly closely related. The detail view shows the distinctive stone hearth lined with quernstone fragments in the lower of the two buildings.*

exceptionally well-preserved 'settlement' dated by pottery to the 5th to 8th centuries AD was discovered. The excavations produced a rich array of finds, but most significant was an intact and well-buried local sequence. Within this, two major successive phases of activity were recorded, with slighter evidence for another, earlier phase, all deeply buried by the sand.

The sand had created an alkaline environment that preserved many classes of finds, including, unusually for Cornwall, large quantities of animal bone. This was the first time that a sequence spanning this period had been discovered in Cornwall, and the large collection of pottery found within the layers has challenged traditional images of the county's 'Dark Age'.

The earliest evidence for post-Roman activity were a couple of pits and a few stone-lined trenches. Iron slag and metal waste found in these imply small-scale metal-working. Three radiocarbon (AMS) dates obtained from residues on pots for this early phase indicate activity from the 5th to the 7th century AD.

The main phases were characterised by small cellular buildings. The remains of up to 12 stone buildings were found, though only two were fully exposed. All appeared to be related, and all abandoned at the same time. With one exception, they were built in a row, aligned east-west, along the southern side of the top of the linear sand-dune.

> "Dark Age Gwithian appears to have been a specialised craft centre – one without parallel in the South West."

## Stone, turf, and timber

All had been built within larger hollows purposely dug into the sand and so appeared as 'sunken' features which nested in the landscape. More or less square or rectangular in form, the majority were linked and shared party walls. Their walls, formed as stone revetments, had been built against turf and soil which lined the sides of the hollows. Postholes were found set within the bases of the revetments, revealing that the buildings had been roofed and of composite build – of stone, turf (or soil), and wood. It seems likely that the eaves of roofs rested upon the top of the revetment and may have reached ground level, with the result that the buildings were truly nested into the ground.

Of the two buildings fully exposed, one (Structure 2241) was small, roughly ovoid, and had been built within a hollow cut deep (0.6m) into clean wind-blown sand. The hollow was stone- and turf-lined, and the building had an

entrance on its eastern side. It measured up to 2.4m in diameter, providing only about 5.8 square metres of floor space. It contained a central hearth lined with the broken fragments of rotary querns, and a stone-lined and stone-capped pit (with evidence for burning). The floor was intact.

When Structure 2241 was abandoned, it was filled with a layer of stone rubble, which may have been collapse but is more likely deliberate. Residue on a potsherd found in this infill gave an AMS date of cal AD 650-780.

Adjoining Structure 2241 and sharing a party wall was Structure 2242, which was also small and roughly rectangular. This too had been built within the same hollow (here 0.9m deep). The internal floor measured 1.8m east-west by 2.4m north-south. An intact upper floor surface overlay the remains of an earlier surface. Five postholes were found, two hearths (the later one built on top of the earlier stone-lined one), and there was some evidence for rebuilding.

This building appeared to open into another small cell to the west, and to the south west was yet another stone cell, which may have been related but was only partially excavated. Structure 2242, like 2241, had been buried under stone rubble on abandonment. Another roughly rectangular building, again only partially excavated, lay immediately the west. It was free-standing and housed a small hearth.

Only partial traces of some five other related structures were excavated along the southern side of the dune. Like the central complex, these were all built in hollows. Together these small buildings appeared to be the hub of a busy complex.

## A blacksmith's lean-to?

Another building of different type and build was discovered on the northern side of the dune. This was coded 'House 1'. It was a roughly rectangular, open-sided building of stone and timber. It faced an apparently open area at the top of the dune, with the line of small cellular buildings beyond to the south. Approximately 9m long by 4.5m wide, it was much larger than all the other buildings. Along its long northern wall lay a doorway and a roughly central north-south stone-built partition. The stone-built walls were freestanding and incorporated square-set post sockets.

**Above** *An unfinished spindle-whorl made from a Bi imported amphora sherd.*

PHOTO: C Thorpe, Gwithian archive.

It remains unclear whether these were the structural remains of two separate buildings or just one. The overall plan does, however, suggest a well-built lean-to rather than an enclosed roofed building.

A large quantity of metalwork was found in this part of the site. Perhaps 'House 1' was a blacksmith's workshop.

Many roughly circular pits were found alongside these distinctive buildings in the central zone of the dune (at site GMI). Most had vertical sides and flat bases. Some had flues with evidence for *in situ* burning. Some contained iron slag and metalwork detritus, indicating iron smelting and smithing.

How were all these buildings used? They seem too small to have been dwellings. A wide range of artefacts found in and around them, including stone, iron and bone tools, along with fish bones, sea shells, animal bones and pottery, suggest multiple and flexible uses. Large quantities of stone implements (many for sharpening metal tools) were found in one building, and whole (but crushed) bar-lug pots were found in two.

The finds point to a number of related craft activities: metalworking (mainly iron, but

## MR CHARLES THOMAS: 80 THIS YEAR!

**From Gwithian, Charles** Thomas progressed to a distinguished academic career, first at Edinburgh, where he wrote a seminal study of Early Christianity in North Britain, and later in Cornwall, where he founded the Institute of Cornish Studies and became its first professor. He promoted the Cornish language, and studied Early Christian inscriptions, arguing in his *Christian Celts* (another seminal book), that many of the inscriptions contained mysterious acrostics (poems or puzzles in which certain letters in each line form a word or words of special significance).

To celebrate Charles Thomas's work, the Royal Institution of Cornwall is organising a one-day conference at the Royal Cornwall Museum in Truro in October this year. Go to the website www.royalcornwallmuseum.org.uk or phone 01872 272205 for further details.

**Above** *Mr Charles Thomas (now Professor) at Gwithian in 1958.* PHOTO: The Archaeological News Letter.

## GWITHIAN POST-ROMAN ARTEFACTS

PHOTOS: C Thorpe, Gwithian archive.

**Top left** *A bronze belt-buckle found at Crane Godley near Gwithian. It is of Merovingian type and probably dates to the 7th-8th centuries AD.* **Top right** *Fragments of a bone comb of* c. *7th century AD date.* **Above** *Sherd of Grass-Marked ware from the base of a large cooking vessel, 7th-8th centuries AD.* **Above right** *Bone* lucet *(a two-pronged tool for making cord), probably made from a pig bone, probably of* c. *7th century AD date.*

also bronze), and the working of bone and leather. The variety and quantity of animal bone implies processing for hides, bone, horn, and meat. Marine shells were also abundant, alongside smaller quantities of fish-bones. There is also some slight evidence for salt-making. Many of the large pits located outside the houses were black with burnt wood, so perhaps there was charcoal-burning to make fuel, and perhaps pot-making. There is evidence for the reuse and recycling of older artefacts, including the intriguing discovery of bits of broken imported pots made into spindle whorls. Some finds were directly associated with the buildings. Others were found in the middens which eventually covered the site.

### An out-of-town craft complex?

Among the metalwork, John Hines has identified some 91 recognisable iron artefacts along with smaller items of scrap. Many were tools, including knives, small adzes/gouges, drill bits, augers, and the remnants of at least two small saws. Agriculture is represented by two reaping hooks, while personal items include dress pins, tweezers, and a possible dagger within a substantially-preserved wooden sheath. One possible status item is part of the cheek piece from a horse bridle, similar to examples found at Whithorn (Dumfries and Galloway) dating from the early 7th century AD, and Lagore Crannog (Co. Meath, Ireland), again broadly 7th century in date.

Then there is the worked bone. Ian Riddler has identified 19 artefacts of bone and antler, and two fragments of antler waste. Dress accessories are represented by a bead and a pin fragment. Personal items include at least two composite combs, both broadly 7th century in date. Household equipment includes a fragment of an antler mount, possibly from a casket. Many of the bone artefacts are associated with textile

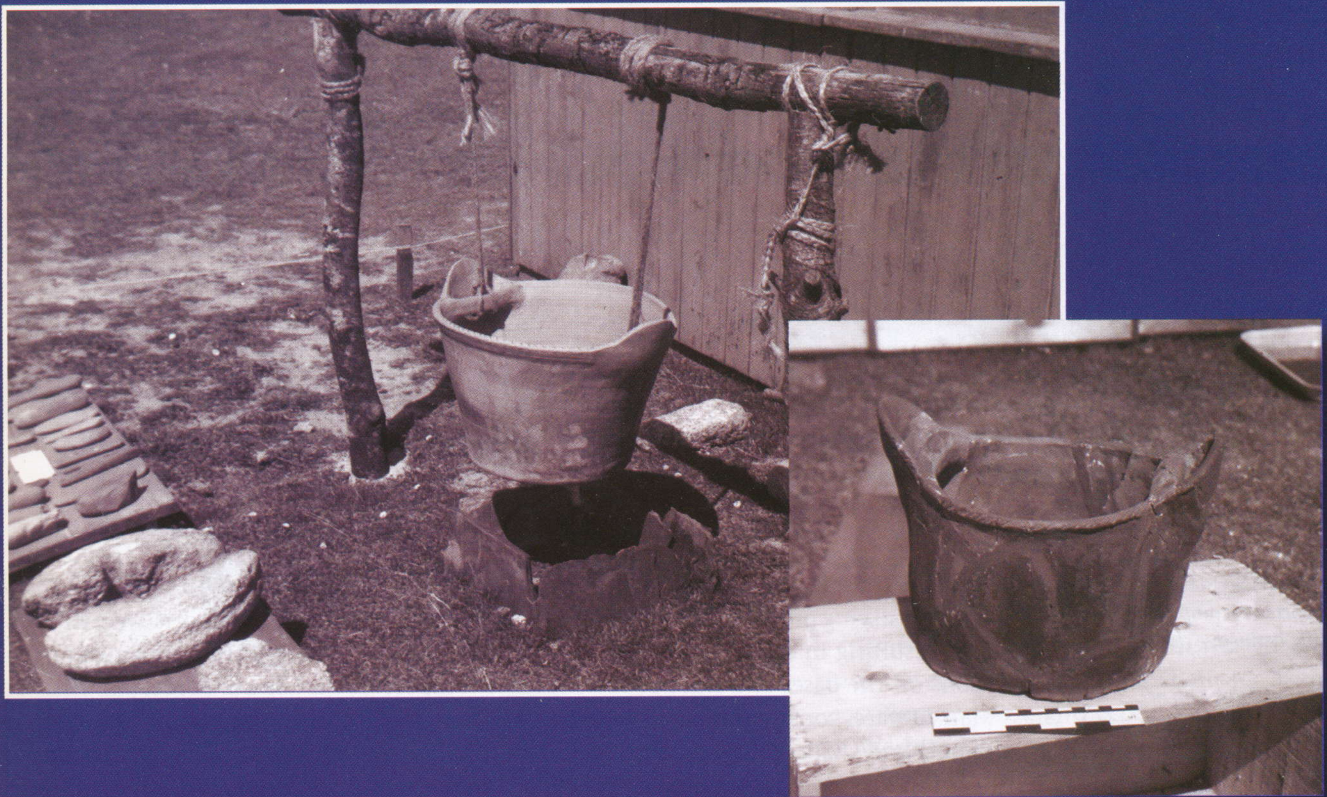


PHOTO: J V S Megaw, Gwithian archive

**Above** *A reconstructed bar-lug pot made by Lake's Pottery in Truro in the 1950s, showing how these distinctive vessels may have been suspended over a fire.*

production, with spindle whorls, needles, and a pin beater (used in weaving). A bone lucet (a tool for cord-making) was also found. Fragments of antler waste suggest on-site preparation and manufacture of artefacts, and some animal bone may have used for the bone handles of metal tools and other objects.

Dark Age Gwithian, its occupation now dated from the late 5th to the 8th century AD, appears to have been a specialised craft centre – one without parallel in the South West. It seems likely that its unusual buildings were seasonal workshop shelters. Exactly how, why, and by whom they were used remains uncertain. The excavated site was perhaps an out-of-town complex established to service a nearby contemporary domestic settlement, the evidence of which has yet to be located, but whose remains may well lie within the (larger) unexcavated part of the dunes.

## Pots and trade

The 1950s Gwithian excavations yielded the largest assemblage of Dark Age pottery – over 3,000 sherds – in Cornwall. It includes both native and imported wares. These have now been scientifically dated and they tell an intriguing story.

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The native wares found at Gwithian reveal great variety but can be classified into two major groups: 'Gwithian Style' and 'Grass-Marked'. These forms are very distinctive, but before the 1950s such pottery had not been found, so their discovery involved a revision of traditional images of Dark Age Britain as a cultural desert.

Gwithian Style jars, large bowls, and low-walled platters are considered a broad continuation of Late Roman pottery in Cornwall, but with the introduction of the use of platters – fine, well-made vessels, often with sanded bases made of Cornish gabbroic clays (which are found only some 30km to the south-east on The Lizard). At Gwithian they are associated with imported Mediterranean pottery (especially the types known to specialists as 'Bii amphorae' and 'E-wares'), and they date from the 6th to the late 7th centuries AD. Residue from one sanded platter has produced a radiocarbon AMS date of cal AD 550-650.

Grass-Marked wares heralded the introduction of a new ceramic

PHOTOS: C Thorpe, Gwithian archive.

**Above** *Body sherd of imported Bii amphora with distinctive ridges.*

**Above right** *Rim of E-ware vessel of c. 7th century AD date.*

production technique, where chopped grass was used in the drying processes before the pots were fired, resulting in distinctive vegetation impressions on the bases and sides of vessels. Grass-Marked wares consist of squat, flat-based cooking pots and shallow platters. This ware, with its limited forms, represents a major cultural break in the way that food was prepared and served, implying a change from individual servings to communal eating. All were made of gabbroic clays, but were less-well made than their Gwithian Style precursors. Their appearance in association with E-ware is considered to date from the 7th century AD.

Bar-lugs represent another technical innovation with the appearance of opposed internal supsension bars (or lugs) set into the rims of the medium and large 'baggy' cooking vessels, presumably so that they could be hung over an open fire. Exactly when they first appear is uncertain – scientific dates are still lacking – but probably before the 8th century AD.

The 200 sherds of imported pottery were also of two main types. The first – A- and B-wares – were fine, wheel-made, Late Roman tablewares. They came from the west coast of Turkey (Ai: Phocaean Red Slipped Ware), the Carthage area of Tunisia (Aii: African Red Slipped Ware), Greece (Bi), and Cilicia in South-East Turkey (Bii). Both A and B wares date from c. AD 475-550, though the B wares seem to have continued being imported at a more modest level into the 7th century AD.

> "With foreign imports and innovative techniques, the Dark Age community at Gwithian seems to have been dynamic and well-connected with the wider world."

The second group of imports were E-wares from France (probably the Saintonge region with export via the Loire or Bordeaux). This was a range of 'kitchen' wares, the most common forms being in a well-thrown, well-fired, almost stoneware fabric. They comprise jars (both large and small with fitted lids), bowls, and mugs. Their date is probably late 6th to early 8th century AD. Recent radiocarbon dates (from residues on pots) have now placed Gwithian Style ware in the late 5th to late 7th centuries AD, making it contemporary with E-wares.

## A safe harbour?

With foreign imports and innovative ceramic techniques, the Dark Age community at Gwithian seems to have been dynamic and well-connected with the wider world. But for whom were the objects made and traded here intended? Surely not just local farming communities? What are we to make of the early appearance of the distinctive bar-lug pottery? And what of the unique range of ironwork found on the site? The 1950s excavations discovered an intriguing site which must have operated within a wider sphere – but any permanent settlement directly related to this 'workshop centre' must lie as yet undetected in the dunes.

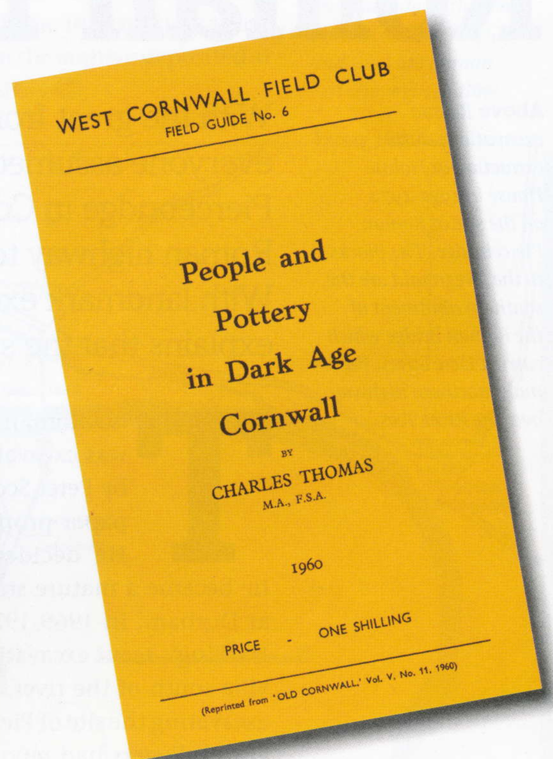
Gwithian lies on the east side of St Ives Bay. Today it is marked by a white lighthouse standing proud on Godrevy Island, a 19th century structure that featured in Virginia Woolf's novel *To the Lighthouse*. The present-day shape of the tidal estuary, where the Red River feeds into the sea at Gwithian, has been dramatically altered

**Above** *House 2 (Structure 2241) as first exposed with post-abandonment infill, Site GMI.* Photo: Ian Cosson, Gwithian Archive.

since the medieval period, with encroachment of sand as well as the industrial canalisation of the Red River during the 18th century. In the post-Roman period, as indeed 2,000 years earlier during the Bronze Age, Gwithian is likely to have been more coastal. The site lies in a sheltered location, and if, as seems likely, the extent of the estuarine foreshore was wider than today, it may have made a fine anchorage. It is the first major bay and landfall for boats sailing westwards from the Isles of Scilly and around Land's End. The pre-Norman name for Gwithian is Conarton or Connerton, and although this cannot be explained in Old Cornish, in primitive Irish, *conar* means 'point of entry' or 'roadway'.

If long-distance trading ships regularly tied up in the estuary some 1,500 years ago, Gwithian may have developed in part to service passing maritime traffic. If so, perhaps the little workshop complex may, among other activities, have provided chandleries for the repair and refurbishment of boats. Some of the imported pottery – or, more likely, the commodities it contained – may have been payment for services rendered. The ultimate destinations of these ships may have been the exceptional fortress citadels of South-West Britain such as Tintagel in Cornwall and Dinas Powys in Wales (or another as yet undiscovered). But there is uncertainty. The quantity of imported material at Gwithian is extraordinary compared with other sites in Western Britain. Even so, contact may have been occasional and infrequent, and further research will be needed to locate the site in its regional context during the 5th to 8th centuries AD.

Gwithian provides a tantalising insight into the complex and varied character of the post-Roman social and economic landscapes of Western Britain. Its coastal location must have been critical to its overall significance in the Dark Ages, when goods, people, pots, and ideas were moving by sea, and that the distant shores of the Eastern Mediterranean were linked with the North Cornish coast by the visits of trading vessels.


WEST CORNWALL FIELD CLUB
FIELD GUIDE No. 6

People and Pottery in Dark Age Cornwall

BY

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1960

PRICE - ONE SHILLING

(Reprinted from 'OLD CORNWALL,' Vol. V, No. 11, 1960)

**Right** *Early publication: A 1960s interim report on the pottery from Gwithian.* Image: HES, Gwithian Archive.

**Source**
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