Later Prehistoric Settlement in Cornwall and the Isles of Scilly: Evidence from Five Excavations

Edited by

Andy M Jones and Graeme Kirkham

Archaeopress Archaeology

Archaeopress Publishing Ltd
Summertown Pavilion
18-24 Middle Way
Summertown
Oxford OX2 7LG

www.archaeopress.com

ISBN 978-1-78969-957-9
ISBN 978-1-78969-958-6 (e-Pdf)

Cover: The Iron Age settlement at Higher Besore reconstructed. (Painting: George Scott.)

This book is available direct from Archaeopress or from our website www.archaeopress.com

Contents

Section 6: Excavation of an Iron Age Settlement and a Roman Period Enclosure at Porthleven, 2014

Andy M Jones, with contributions from Paul Bidwell, Dana Challinor, Anna Lawson-Jones, Henrietta Quinnell, Clare Randall, Ryan P Smith and Roger Taylor

Section 7: Review and Overview

Andy M Jones

List of Figures

Section 1: Background to the Project

Section 2: Archaeological Recording during the 1996 Coast Protection Scheme at Porth Killier, St Agnes, Isles of Scilly

Section 3: Excavations at Killigrew 1996: an Iron Age and Romano-British Industrial Site on the Trispen Bypass, Cornwall

Section 4: Archaeological Investigations at Nancemere, Truro, Cornwall 2002: a Prehistoric and Romano-British Landscape

Section 5: Life Outside the Round: Bronze Age and Iron Age Settlement at Higher Besore and Truro College, Threemilestone, Truro, 2004–5

Section 6: Excavation of an Iron Age Settlement and a Roman Period Enclosure at Porthleven, 2014

Section 7: Review and Overview

List of Tables

Section 2: Archaeological Recording during the 1996 Coast Protection Scheme at Porth Killier, St Agnes, Isles of Scilly

Section 3: Excavations at Killigrew 1996: an Iron Age and Romano-British Industrial Site on the Trispen Bypass, Cornwall

Section 4: Archaeological Investigations at Nancemere, Truro, Cornwall 2002: a Prehistoric and Romano-British Landscape

Section 5: Life Outside the Round: Bronze Age and Iron Age Settlement at Higher Besore and Truro College, Threemilestone, Truro, 2004–5

Section 6: Excavation of an Iron Age Settlement and a Roman Period Enclosure at Porthleven, 2014

Acknowledgements

The editors would like to thank Henrietta Quinnell, Freya Lawson-Jones and Sara Homes for reading the finalized chapters.

Porth Killier, St Agnes

The programme of archaeological recording was commissioned by the Council of the Isles of Scilly. The Coastal Protection Scheme (CPS) was designed by consultant engineers Aspen Burrow Crocker, and constructed by T J Brent Ltd.

Alison Locker would like to thank Dr Terry O'Connor (University of York) for identifying the grey seal immature pelvis and Dr Jacqui Mulville (University of Cardiff) for information on grey seal breeding habits.

Jan Light is grateful to Steve Hawkins and Roger Burrows for allowing her access to their unpublished data on *Patella* spp.

Within Cornwall Archaeological Unit, the 1996 fieldwork was undertaken by Andrew Young and Carl Thorpe, soil samples were sieved by Ann Reynolds, the archive report was compiled by Jeanette Ratcliffe and Andrew Young in 1997, and an unfinished site report (1999) begun by Jeanette Ratcliffe, who was the project manager. The report was edited and completed between 2006 and 2018 by Charles Johns and Andy M Jones, with illustrations by Sean Taylor and Carl Thorpe. Revisions to drawings were made by Connor Motley.

Killigrew round

The authors would like to thank Transportation and Estates division of Cornwall County Council for commissioning them to undertake the project.

Expert advice was given by Vanessa Straker (Historic England), Henrietta Quinnell, Dr David Starley and Dr Justine Bayley of the Ancient Monuments Laboratory at the Centre for Archaeology, English Heritage, Margaret Brooks and Virginia Neal, Wiltshire Consultation Services. We are also grateful for the contributions of Albertine Malham and Gerry McDonnell (Ancient Metallurgy Research Group, University of Bradford), Dr R. Taylor and Sophie Lamb. Many thanks are also extended to Anna Tyacke, Jane Marley and Laura Ratcliffe-Warren of the Royal Cornwall Museum, Truro for advice and help with the storage and conservation of the Killigrew tin dish. Scientific dating was carried out by the University of Waikato Radiocarbon Dating Laboratory, New Zealand. Many thanks are also extended to Peter Rose and Henrietta Quinnell for their comments on earlier versions of the text. We are very grateful for the insights and valuable comments by colleagues Adam Sharpe and Andrew Young which have helped sharpen ideas on metalworking and enclosures in general.

The Cornwall Archaeological Unit excavation team comprised Anna Lawson-Jones, Ann Reynolds and Carl Thorpe. Jane Powning drew the maps, Dick Cole the plans, and Carl Thorpe produced the artefact drawings. Revisions to the drawings were made by Connor Motley. A considerable number of unpaid volunteers worked on site. Many were Archaeology A-level students at St Austell and Truro Colleges and members of the public. The project was managed by Jacky Nowakowski.

The authors would also like to thank the following people for their help with the excavation: Charlotte Andrew, Chris Barber, Phil Best, Andrew Cochrane, Mark Cole, Kevin Denton, Kirk Denton, Becky Edwards, Hannah Edwards, Steve Ellis, Ben Found, Polly Fryer, Murray Gould, Steven Grey, Richard Harwood, Val Hazel, David Henzell, Jo Higgins, James Keasley, Liz Keasley, Pam Lee, Darren Limbert, Jack Major, Calvin Malham, Mitch Mitchell, Mike and Tina O'Connor, Phil Oggleby, Andy Pearce, Isabel Popple, Stuart Pulley, Hannah Saint, Sophy Savage, Jago Titcomb, Andrew Venton, Imogen Wood, Pam Worthington and Duncan Yeates.

Nancemere

Thanks to Cofton Ltd for funding this project. Many thanks also to Sally Ealey, Pam Lee and Konstanze Rahn of Cornwall Archaeological Society for their assistance in processing environmental samples and finds. Thanks to all

those specialists and colleagues who have provided advice throughout the post-excavation stage and especially to the field team who were Dick Cole, Neil Craze, Peter Dudley (supervisor), Matt Mossop, Alex Osborne, Stuart Randall, Emma Ruddle, Sean Taylor, Anna Tyacke, Megan Val Baker, Dave Williams and Andrew Young. The project was managed by Andy M Jones.

Many thanks also to Sally Ealey, Pam Lee and Konstanze Rahn of Cornwall Archaeological Society for their assistance in processing environmental samples and finds.

Higher Besore

The project at Higher Besore was funded by Interserve Project Services Ltd, CCC Planning Transportation and Estates Property Resources Group and Capita Symonds Ltd.

Thanks to the many specialists involved in the project whose work has contributed to this report: Justine Bayley, Paul Bidwell, Sarnia Butcher, Wendy Carruthers, Rowena Gale, Alan Hogg, J D Hill, Julie Jones, Anna Lawson-Jones, Roger McBride, Stuart Needham, Peter Northover, Cynthia Poole, Henrietta Quinnell, Roger Taylor, Carl Thorpe, Anna Tyacke and Tim Young. Special thanks go to Henrietta Quinnell for the many useful comments and advice on the draft report. Henrietta Quinnell is grateful to E L Morris for discussion on the Bronze Age plain ware from Dorset.

Within Cornwall Archaeological Unit, the project manager was Charles Johns and the fieldwork team comprised Pete Dudley, Megan Val Baker, Neil Craze, Carmello Grasso, Lynne Hendy, Anna Lawson-Jones, Hilary Orange, Stuart Randall, Theresa Rowell, Emma Ruddle, Jens Samuel, Marc Steinmetzer, Jo Sturgess, Helen Thomas, Anna Tyacke, Katie Watkins and Imogen Wood, site archaeologists. Carl Thorpe produced artefact illustrations and Graeme Kirkham and Peter Rose provided useful comments on the text.

Thanks are also extended to Cornwall Archaeology Society volunteers, especially Michael Blake, Jean Hughes, Adrian Rodda, Trudy Staynings, Mick Triplett and Christine Wilson.

Porthleven

This Porthleven project was commissioned by 3MS Construction and carried out by Cornwall Archaeological Unit, Cornwall Council.

The Project Manager was Andy M Jones and the Project Officer was Ryan Smith. The excavation team comprised Hayley Goacher, Paul Reddish, Ian Rose, Emma Ruddle and Megan Val Baker, with volunteers Martin Andrews, Bret Archer and Richard Mikulski. Maps and plans were produced by George Scott. Thanks to Anna Tyacke for information and photographs of the Roman period brooch and the Late Iron Age terret.

Henrietta Quinnell thanks Cynthia Poole for constructive comment upon the hearth and Ruth Shaffrey for that on the pivot bearing.

Section 1:
Background to the Project

Andy M Jones

Chapter 1:
Introduction to the Volume

Background

In the period between 1996 and 2014 Cornwall Archaeological Unit, Cornwall Council, undertook archaeological investigations at five later prehistoric and Roman period settlements around Cornwall and the Isles of Scilly, which for a variety of reasons, have until now remained unpublished (Figure 1.1).

Of these sites, three were small-scale and evaluative, as at Nancemere, targeted in response to coastal erosion as at Porth Killier, or carried out in challenging conditions as at Killigrew round (Figure 1.2). Higher Besore and Porthleven by contrast, were more substantive excavations, which resulted in larger areas being soil stripped.

Despite the sometimes very long delays to publication, these programmes of archaeological investigation are very significant as they have revealed several settlement phases, which span the later prehistoric to Roman periods. They include Middle and Late Bronze Age roundhouses, field boundaries and unenclosed settlements of Iron Age date, and enclosures belonging to the Late Iron Age Roman period. Remarkably, despite the varying scale of the archaeological recording, when taken together the excavated evidence from all the investigated sites provide interesting and often broadly comparable sequences. For example, all four of the mainland sites reveal growing evidence for enclosure and occupation in the Late Iron Age and early Roman periods. Two of the sites also seem to have developed along specialist lines and were perhaps more closely associated with metalworking than inhabitation

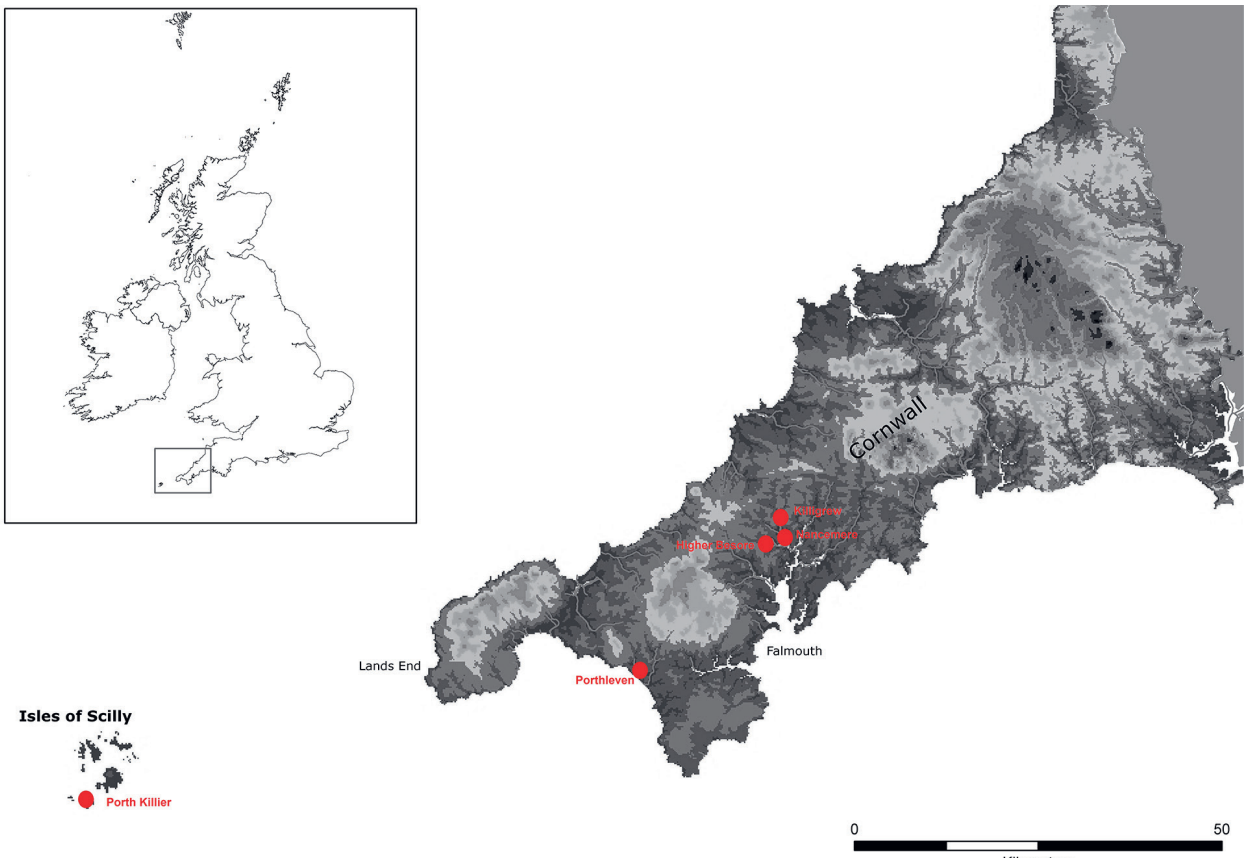

Figure 1.1 Map of Cornwall showing sites covered by this monograph.

Figure 1.2 Killigrew 1996, general view of excavation looking north.

(Killigrew and Porthleven). Three of the sites in mid Cornwall are located either on the fringes of Truro (Higher Besore and Nancemere) or a few kilometres to the north of the city (Killigrew). This also allows for comparisons and contrasts to be made between them.

In the light of the very significant cumulative results generated by these projects relating to the later prehistoric and Roman periods, the decision was made to draw them together into a single publication, which would provide an overview of settlement activity across Cornwall and the Isles of Scilly in later prehistory.

Report structure

Following this introductory section, the resulting monograph is divided into five parts with a sixth discursive section at the end. Given the range of sites included and the detailed specialist work which has been done on many of them, it was decided that each section would be self-contained so that they can be read as separate, free-standing contributions. They have, however, been arranged in chronological order, by year of excavation, so that they can be read sequentially. A concise interpretative overview highlighting some of the themes to emerge is given at the end.

Each section commences with the stratigraphical results from the project organized by chronological periods. This is followed by successive specialist chapters on the artefacts, the environmental analysis and radiocarbon dating. Each section concludes with the discussion. Given that each piece of work and its analysis was undertaken by a range of authors at different times, the style and focus of the discussions is varied in character but does reflect the then current context in which the work was carried out. For the purposes of this monograph we have therefore decided to leave these largely as completed by their authors, with a limited amount of updating, for example to reflect the publication of works which are no longer 'forthcoming'. We have also updated radiocarbon dating citations, so that all quoted dates use a standard calibration curve.

We have, however, not altered the content of specialist reports, which by and large were written close to the time of excavation. This means that, particularly the older sites do not contain references to more recent investigations, for example the TEDC site (Taylor, forthcoming), which is located near to both Killigrew and Nancemere is not referred to in either report. The arranging of chapters in the sequence in which they were excavated with the oldest first does nonetheless help reflect changing aims and objectives and perspectives as one progresses through the volume.

Any remaining potential inconsistencies between ideas expressed in the discursive chapters is remedied by the seventh and final section. This final synthetic chapter is concerned with the discussion of the more significant themes which have arisen from all five of the investigated sites, and also draws on other more recent work undertaken in Cornwall over the last decade.

Terminology used in this report

Throughout this report structures are denoted by numbers without brackets; for example, House 4. Context numbers for cuts – ditches, pits, postholes and

similar features – are shown in square brackets: [126] and their fills, layers and other deposits are shown with round brackets: (126).

The term ring-gully is used throughout the report to denote ditching around the perimeter of both structures and hollows of circular or oval shape.

Specialist reports are, for the most part, reproduced as accepted edited manuscripts and consequently terminology used within in them will reflect the time that they were written.

The radiocarbon dating probability distributions (Sections 2, 3, 4, 5 and 6) were calculated using OxCal (v4.3). Unless stated otherwise, the 95 per cent level of probability has been used throughout this volume; calibrated determinations cited in the text may therefore differ from older published sources.

Finally, despite the chronological range of the settlements under discussion, the decision was made to use the term 'later prehistoric settlement' as opposed to 'later prehistoric and Roman settlement' in the title of this monograph. This does not imply that the Roman Conquest and the subsequent colonial regime did not bring about disruption and very significant changes to the fabric of communities in Cornwall either in terms of administration or in social organization. Indeed, the potential implications of this process are touched upon in the synthesis at the end of the volume (Section 7). Instead, 'later prehistoric' is used in part to highlight continuity in some areas, such as the construction of settlement enclosures that had already started, on an albeit smaller scale, in the later Iron Age, as well as patterns of structured deposition which had considerably deeper roots. The title, however, also partly reflects the fact that Cornwall was distant from the nearest administrative centre in Exeter, and consequently little is directly known either about its governance or indeed of any of its inhabitants' lives, whose names remain, like those of their Iron Age forebears, undocumented.

Section 2:
Archaeological Recording during the 1996 Coast Protection Scheme at Porth Killier, St Agnes, Isles of Scilly

Charles Johns, Jeanette Ratcliffe and Andrew Young, with contributions from David Dungworth, Janice Light, Alison Locker, Henrietta Quinnell, Vanessa Straker and Roger Taylor

In 1996 the Cornwall Archaeological Unit carried out a programme of archaeological recording associated with a Coast Protection Scheme on the north side of St Agnes in the Isles of Scilly. Work was mainly focused in Porth Killier, where building a new sea wall had an impact on nationally important Bronze Age remains exposed in the low cliff face. A small amount of recording also took place in Porth Coose, where a submerged peat deposit and stone walling are located towards the top of the beach.

At Porth Killier the results fell into four zones. Working from east to west along the cliff face, these can be summarized as follows: Zone A, Bronze Age buildings, midden and a wall; Zone B, a series of Bronze Age pits, Zone C, an Early Bronze Age cairn or entrance grave and a prehistoric wall, Zone D, marine sand with no archaeological remains.

Chapter 2.1:
Background to the Excavations

During May and June 1996, Cornwall Archaeological Unit (CAU) carried out a programme of archaeological recording associated with a Coast Protection Scheme (CPS) on the north side of the island of St Agnes on behalf of the Council of the Isles of Scilly (Figures 2.1, 2.2 and 2.22). The need for archaeological recording had been identified in the Environmental Statement prepared for the scheme (Nicholas Pearson Associates 1995). The archaeological work was mainly focused in Porth Killier, where building a new sea wall had an impact on nationally important Bronze Age remains exposed in the low cliff face (prehistoric settlement and field system close to Porth Killier; National Heritage List Entry 1014998). The overall aim of the 1996 recording work was to gain as much information as possible about the date, character and function of the site prior to the new sea wall being constructed in front of it.

Location and landscape setting

The project area is located on the north side of the island of St Agnes in the Isles of Scilly (Figure 2.1). Here a flat, low-lying neck of land contains Big Pool, a Site of Special Scientific Interest (SSSI) and the only open fresh water on the island, apart from the much smaller and shallower Little Pool to the east (Figures 2.1, 2.2 and 2.3). Small pasture and bulb fields (enclosed by stone walls and hedging plants) occupy the headland to the north and the ground to the south, which slopes steadily up towards the island's central, east-west ridge. The neck, however, is unenclosed and covered in rough grassland. It lies only just above high water (the surface of Big Pool being approximately 2.5m OD) and low dune banks separate it from Porth Killier to the east and the bays of Porth Coose and Periglis to the west. Prior to the

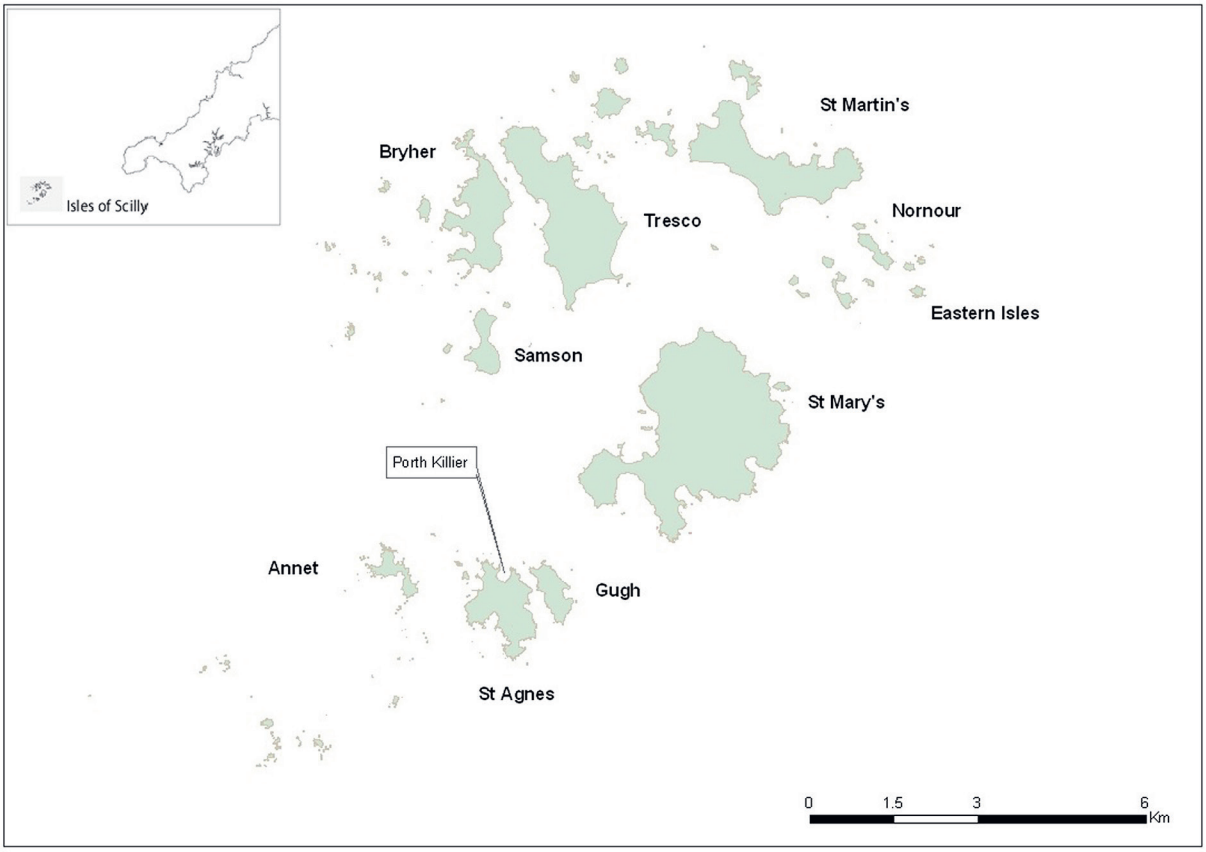

Figure 2.1 Location map showing Isles of Scilly and area of excavation.

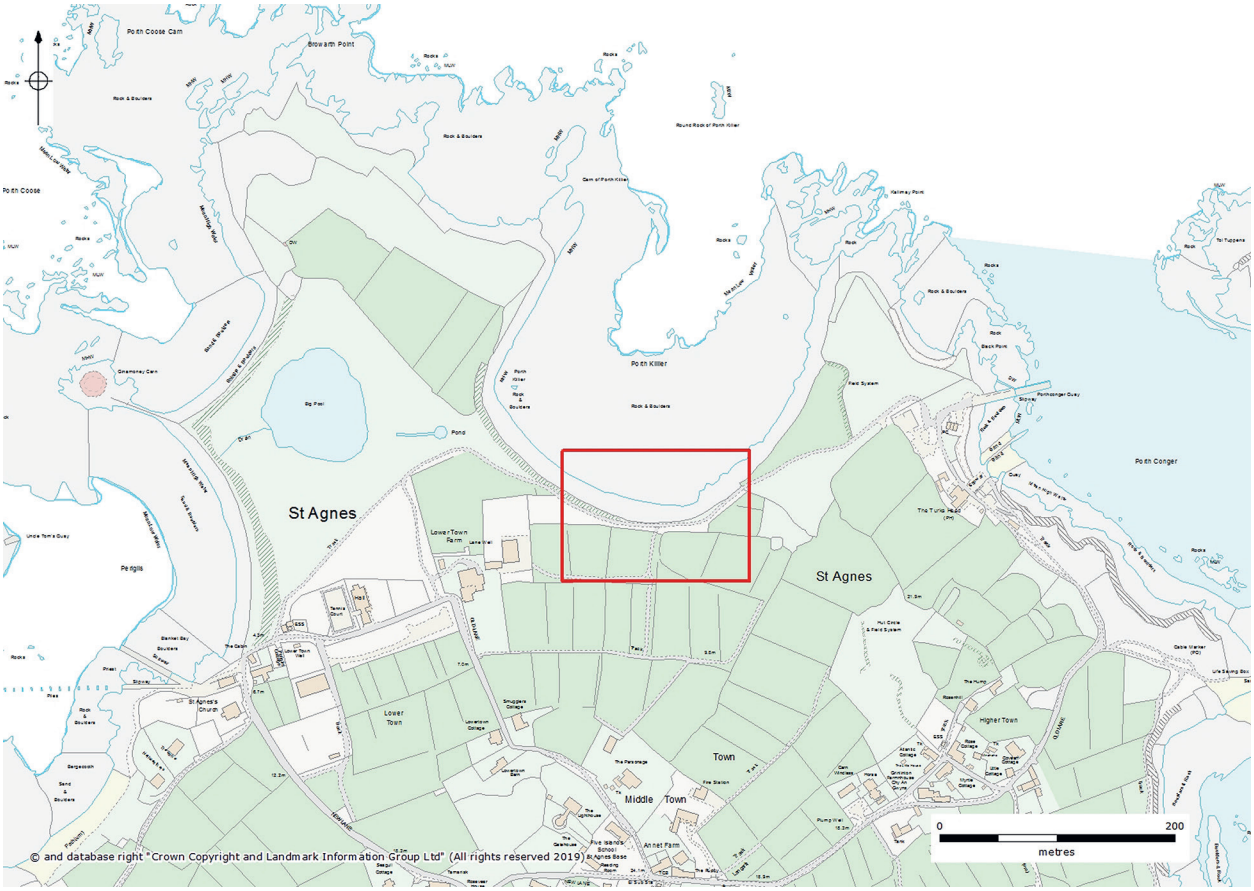

Figure 2.2 Modern Landline mapping (area of excavation shown in red box).

CPS, these banks rose only 1–2m above the level of Big Pool. They were originally formed by tidal and aeolian action but had been built up by islanders (using large stones and builders' rubble) in an effort to counteract erosion by the sea. The water within the three bays is shallow and at low water the intertidal zone stretches out for some distance, exposing expanses of sand and seaweed-covered rock.

Facing north-north-east, Porth Killier is the largest and most rugged of the three bays, with a steep beach of sand, shingles, and cobbles, giving way to an expanse of bedrock and boulders. Prior to the 1996 scheme, the bay was enclosed by a dune bank (on its west and south side) and a low, crumbling, vertical cliff. The latter, comprised soil layers (containing archaeological features and artefacts) overlying *ram* (the natural granite subsoil) and raised beach deposits, extended along the eastern side of Porth Killier, out to the scrub-covered, rocky headland of Kallimay Point. In the south-eastern corner of the bay the cliff was interrupted by a protuberance of outcropping granite. Along the bay's south side, at the junction between dune and cliff, there were the 5m long remains of a 1m high granite and concrete sea wall, constructed in 1931 to protect a cliff-top track and fields behind associated with Lower Town Farm. During 1989, as an emergency coast protection measure, boulders were dumped at either end of this wall by the Royal Marines.

The other bays have sandy beaches, backed by dune banks. Periglis, which is sheltered on the north by Burnt Island, was once the main landing place for St Agnes and still serves as an anchorage for small fishing boats and sailing vessels. Porth Coose is a smaller, more exposed beach, facing north-west and bounded by rocky promontories – Porth Coose Carn to the north-east and Ginamoney Carn to the south-west. Prior to 1996, there was a dilapidated groyne (made up of stone and steel rails from the old lifeboat slipway) extending from the shore to Ginamoney Carn and separating Porth Coose from Periglis.

Modern day settlement in the vicinity of the CPS consists of Lower Town Farm and a cluster of houses around St Agnes Church. The surrounding farmland is comprised of bulb strips hedged with tamarisk, pittosporum, and euonymus, which are used for flower production, and stone-walled fields which are mainly under pasture. The latter constitute Anciently Enclosed Land of prehistoric or medieval origin (Land Use Consultants 1996).

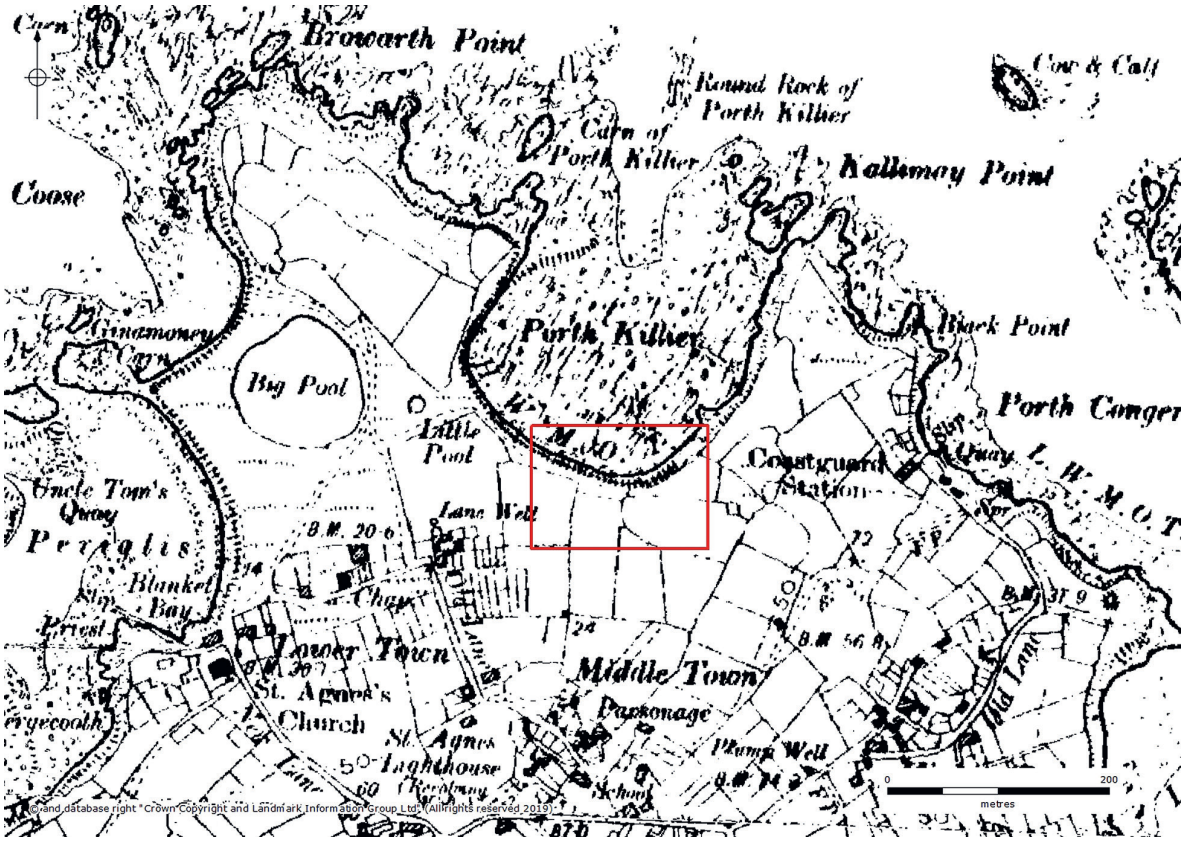

Figure 2.3 Detail from 1876 OS map (area of excavation shown in red box).

The geology of St Agnes is granite, with weathered periglacial head, known locally as *ram*, covering the lower hill slopes and valley floors; the geology supports soils suitable for cultivation and pasture (Geological Survey of Great Britain, 1975, Isles of Scilly, Sheets 357 and 358).

Coastal change in the last 100 years

By comparing the 1876 25-inch map (Figure 2.3) with the modern (1981) 1:2500 OS map, it is possible to gain some idea of the extent to which the cliff in the south-east corner of Porth Killier has eroded during the last 100 years. In 1876 the drystone granite wall forming the north-west side of the small wedge-shaped field lying immediately behind the cliff still existed in its entirety (albeit in places right on the cliff edge). By 1981 this wall only survived at its north-east end, where the projecting rock outcrop had prevented erosion. Elsewhere wave action had cut back the cliff edge by at least 1.5 m, the field wall having presumably collapsed onto the shore below (though stones from it may have been reused in the 1931 sea wall).

Archaeological and historical background

The low crumbling cliff in the south-east corner of Porth Killier, constitutes arguably the most archaeologically-rich length of cliff face in Scilly. Documented for over 60 years, it is best known for its extensive limpet middens, which over this time have yielded a significant amount of artefactual and palaeoenvironmental material. Together with the walls of stone roundhouses, they represent the remains of a Bronze Age settlement whose inhabitants exploited marine resources (fish, seals, shellfish, and seabirds), as well as, to a lesser extent, practising farming and other land-based activities. Prior to 1996, there was nothing about the site to suggest that it was anything more than a domestic settlement, but the CPS work exposed a series of pits, which may have had a semi-industrial function, together with what appears to be the remains of a burial cairn (with a stone-lined cist or chamber).

The site was first recorded by amateur archaeologist Alec Gray in 1936, at which time the only recognisable feature was a midden yielding Bronze Age pottery (Gray 1972, 43). The only bones found were seal, leading Gray to suggest this was a seasonal habitation site where seal and fish meat was preserved. After 1936 more remains were exposed and destroyed by coastal erosion, and quantities of pottery, flint, animal bone, charcoal and unfired clay, and a granite quern rubber were collected from the cliff face, together with what was thought to be a fragment of a Bronze knife (now lost). The animal

species identified were sheep, ox and cetacean, the last probably a porpoise (Turk 1968, 78).

During October 1985 archaeologists from the Institute of Cornish Studies (ICS) made a sketch section drawing of the (three?) roundhouses and four limpet middens then visible (Ratcliffe and Thorpe 1991, 12). Numerous sherds of Bronze Age pottery (and several Iron Age/ Romano-British and early medieval) were retrieved from the cliff face, together with a couple of flint flakes and animal bone representing the remains of a variety of mammals (ox, sheep, red deer, horse and dolphin), birds (domestic fowl, razorbill, stone curlew, coot, and corncrake), fish (red gurnard, coalfish, grey mullet and pollack) (*ibid*, 71, 82, 105).

CAU started monitoring the site in 1988 and in March 1989 English Heritage's Ancient Monuments Laboratory carried out resistivity and magnetometer surveys in the field behind the cliff exposure to detect the presence of buried archaeological remains. The survey results suggested that the settlement extended inland for a distance of up to 12m (Jordan 1989; Ratcliffe and Parkes 1989, 9–11).

During September 1989 a detailed record was made of a 28m length of cliff face (Ratcliffe and Parkes 1990, 27–32), which identified: the eroding remnant of a substantial circular stone building, a second structure comprising two pieces of walling, nine limpet middens, two layers of dark humic material apparently representing a limpet-free midden from which (unusually) limpets were absent; a buried land surface(s) predating the use of the settlement and post-occupation layers that had accumulated since its abandonment.

Numerous sherds of second millennium BC pottery were collected and bulk samples were taken for environmental analysis. The bones of a wide range of domestic and wild animals were identified, including seven fish and 10 bird species not previously recorded from the site. Cultivated plants (barley, emmer wheat and celtic bean) were identified amongst the plant macrofossils, which suggested that the settlement was set in a coastal environment which included blown sand, grassland and boggy areas, as well as arable fields and heathland. Radiocarbon dating revealed that the most extensive limpet midden had formed during the Middle Bronze Age, while the non-limpet midden was of Late Bronze Age date (Ratcliffe and Straker 1996, 62–73).

Over the following four years (1990–1993) the site was revisited as part of CAU's annual coastal monitoring programme (Ratcliffe and Sharpe 1991, 48–50; Ratcliffe 1993, 33, 40; Ratcliffe 1994, 11–12). Several newly exposed features were recorded in the cliff section drawn in 1989 and settlement remains were also recorded to the north-east. Numerous artefacts were retrieved, including a Romano-British brooch found by amateur archaeologist, Michael Tangye.

Many of the features and layers exposed in the cliff face in 1989 (and subsequent years) were still recognisable in 1996. In order to make it possible to tie in the results of previous work with those from the 1996 recording, a table correlating the two sets of site context numbers is included in the project archive.

Project background

St Agnes Coastal Protection Scheme

The need for archaeological recording was identified in the Environmental Statement prepared for the scheme (Nicholas Pearson Associates 1995). The St Agnes CPS was designed by Aspen Burrow Crocker, consultant engineers working for the Council of the Isles of Scilly, and T J Brent were contracted to carry out the construction work which consisted of three different types of work:

Construction of a granite-faced mass concrete sea wall – this extended westward for 80m from the rock outcrop in the south-eastern corner of Porth Killier.

Reinforcement of the dune – this took place in Porth Coose and along the southern side of Porth Killier, and involved the use of Armorflex concrete block revetment, Enkamat erosion control matting, and imported Cornish granite.

Raising the dune height – this was carried out in Periglis, using Enkamat and imported fill.

Archaeological impact

In Periglis the nature of the CPS work mitigated against any disturbance of archaeological remains. In the other two bays, however, the scheme had an archaeological impact.

Preparation work for the construction of the sea wall in Porth Killier involved removal of the short length of 1930s sea wall and boulders dumped by the Royal Marines during 1989, trimming back the cliff edge at one location (between 50m and 60m from the eastern end) and the excavation of a 1m deep foundation trench into the shelf of subsoil (*ram*) in front of the cliff face. The sea wall was constructed of successive layers of concrete behind a random granite face.

This work had a direct impact on the nationally important Bronze Age remains exposed in the 1.5m high cliff face (part of prehistoric settlement and field system close to Porth Killier, National Heritage List

Entry 1014998). Stone-built houses and limpet middens were already visible, and removal of the earlier sea defences revealed previously unrecorded remains – a series of pits and a burial cairn. Trimming back the cliff edge involved the partial removal of the cairn, and the foundation trench for the new sea wall cut through what was left of the interior of the main building. This loss was offset, however, by the fact that (except for a small part of the site that lies to the north-east of the rock outcrop) the new sea wall was constructed along the full length of the archaeological exposure, affording it protection from further coastal erosion. During the building of the wall, plastic sheeting was draped over the cliff section to prevent the wet concrete adhering to the archaeological remains. This measure should ensure that the latter remain undamaged if the wall is dismantled in the future. Anchoring the Armorflex concrete block revetment into the dune involved machine digging to a depth of 1–2m, but no archaeological remains were revealed by this process.

At Porth Coose, machine excavations associated with anchoring the Armorflex into the dune revealed nothing of archaeological significance. Manoeuvring of heavy vehicles across the surface of the beach, however, disturbed a previously unrecorded intertidal peat exposure at approximately SV 87725 08610. The stone remains of a field wall and possible roundhouse were also observed nearby.

Aims and objectives of the 1996 recording

The overall aim of the 1996 recording work was to gain as much information as possible about the date, character and function of the site prior to the new sea wall being constructed in front of it.

During previous fieldwork (1985–1993) understanding of the exposed remains was hindered by the limited nature of the recording and the fact that the western part of the cliff face was obscured by the 1930s sea wall and the boulders dumped in 1989. In terms of the dating of the site, no radiocarbon results relating to the actual use of the main roundhouse had been obtained. In addition, the provenance of a handful of Iron Age/Romano-British and early medieval artefacts was unknown. The site had been shown to be of high palaeoenvironmental potential and much useful information had already been obtained about the diet and subsistence economy of the settlement's inhabitants and the nature of the surrounding environment. There were, however, certain types of environmental material that had not yet been studied from the site – marine molluscs, land snails and pollen.

Amongst the animal bones already identified from the site were two species which were particularly interesting from both a biological and archaeological point of view – the Scilly shrew and the toad. The latter is not present in Scilly today and, therefore, its discovery in a Bronze Age context at Porth Killier was very interesting. The shrew does populate the present islands and it was possible that the Porth Killier bones are later intrusions, but evidence from other early sites suggests this animal may have been present during prehistoric times. Retrieval and radiocarbon dating of the bones of both animals would greatly enhance understanding of their history in the Islands.

Given the points mentioned above, the main objectives of the 1996 recording work were as follows:

- Make a detailed record of the structures, features and layers exposed in the cliff face in order to gain a fuller understanding of the character of the settlement.
- Date the exposed layers, particularly those relating to the use of the building(s).
- Retrieve and date all pottery and other artefacts.
- Obtain bulk samples of midden and other organic deposits in order to gain more information on the diet and economy of the settlement's inhabitants and the surrounding environment.
- Retrieve and analyse those types of environmental material not previously studied from this site (for example, marine molluscs, land snails, and pollen).
- Retrieve and date the bones of the Scilly shrew and the toad to enhance understanding of these species in the Scilly.

Methodology

The total length of cliff examined was 80m. Following removal of earlier sea defences, archaeology could be seen to survive in the eastern 60m of cliff face. Between 60m and 80m a series of machine-excavated test pits revealed only marine sand overlain by shingle.

For the 60m of cliff in which archaeological remains survived the cliff edge was planned to scale and a detailed drawing was made of the cliff section. At two locations archaeological remains protruded beyond the general curve of the cliff and excavation by hand was required to accommodate the line of the new sea wall. This occurred between 20m and 30m from the eastern end of the section, where part of the interior of the main roundhouse survived on a shelf of *ram*, and at the western end of the site, where the remains of a burial cairn had previously been protected by the 1930s sea wall. Across the site, all identified layers and features were assigned context numbers and described on site context forms, and a full photographic record was made.

Artefacts were retrieved by two methods – by hand during the recording of the cliff section (with some artefacts being allocated small find numbers and their location plotted on the section drawings and plans), and from the bulk soil samples, during and after sieving (see below).

The following environmental samples were taken: bulk samples of most of the primary layers and fills; a kubiena sample from the pre-settlement old land surface, context (40), in Zone A; a pollen sample from the pre-settlement old land surface, context (141), at the west end of Zone B; and a kubiena sample from the bottom of one of the pits, pit [50] in Zone B.

All bulk samples were processed by wet sieving, the floats being collected on a 250 micron mesh and the residues on a 500 micron mesh. All the residues were completely sorted, and artefacts, animal bone, shell, charcoal and other material extracted from them.