# Cornwall Historic Landscape Character texts (2008)

(Developed from texts prepared in 1994 by Peter Herring for the Cornwall Landscape Character Assessment; Cornwall County Council 1996)



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#### Introduction

All of Cornwall and all of Britain is an historic landscape. Nowhere is unaffected by the actions of people, and all is also perceived, experienced and considered by people. There is nowhere in Britain that is purely natural. The famous beauty of Cornwall and Britain is to a great extent a product of human action and perception.

This historic landscape is remarkably complex, filled with structures, patterns, and communities (human and semi-natural), all overlain by varied personal and communal perceptions, interpretations and meanings. To help people develop the understanding of historic character that allows them to act with care and confidence, the British landscape is being subjected to a programme of historic landscape characterisation (HLC), in which repeating patterns or attributes are used to assign blocks of landscape to particular HLC Types.

This text provides a commentary on each of the Historic Landscape Character Types mapped in the 1994 Cornwall HLC, the first Historic Landscape Characterisation to be undertaken for a whole county in Britain. It is intended to help users better understand the origins and components of Cornwall's historic landscape character and the issues affecting it. The text, when used with the HLC mapping, enables the historic or cultural to be considered alongside, around and within aesthetic and ecological appreciations of landscape.

The following is a list of the HLC Types identified in the 1994 HLC.

- Rough Ground (subdivided into upland, coastal and dunes)
- Woodland
- Plantations
- Intertidal and inshore water
- Anciently Enclosed Land
- Post-medieval Enclosed Land
- Modern Enclosed Land
- Settlement
- Ornamental
- Industrial
- Communications
- Recreational
- Military
- Reservoirs

The texts can also form the basis for preparation of Historic Environment Action Plans (HEAPs) for the various HLC Types. A HEAP, like a Biodiversity Action Plan (BAP), presents statements outlining current understanding of an asset, in this case aspects of the historic environment, such as an HLC Type (considering historical processes, typical archaeological, historical and semi-natural components), comments on its survival and a range of ways of valuing it, and reviews forces for change acting on it, before making a number of recommendations for actions that would safeguard the fabric and character of the asset. These recommendations could be worked up by agencies, authorities, managers and individuals into actions.

Regarding values, one of the principles of HLC is that all types have value and all can be managed or curated in ways appropriate to their character. Care has been taken to avoid ascribing absolute or inherent values to any HLC type, so that users do not consider one type to be inherently more important than another. But it is possible, and useful in various applications of the material, to consider how each Type sits within the scheme of four main heritage values (evidential, historical, aesthetic and communal) as set out within English

Heritage's *Conservation Principles for the Sustainable Management of the Historic Environment* (English Heritage 2008). The following are introductions to each of these.

#### **Evidential value**

Evidential value derives from the potential of a place, or a type of place, to yield evidence about past human activity. Physical remains of past human activity are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them. These remains are part of a record of the past that begins with traces of early humans and continues to be created and destroyed today. Their evidential value is proportionate to their potential to contribute to people's understanding of the past.

In the absence of written records, the material record, particularly archaeological deposits, provides the only source of evidence about the distant past. Age is therefore one indicator of relative evidential value, but is not paramount, since the material record is the primary source of evidence about poorly-documented aspects of any period, including the very recent.

In the following texts the notes on evidential value concentrate on the potential of our understanding of the particular HLC Type to be improved by further archaeological and historical research.

#### Historical value

Historical value derives from the ways in which past people, events and aspects of life can be connected through a place, or a type of place, to the present. It tends to be *illustrative* or associative. The idea of *illustrating* aspects of history or prehistory – the perception of a place as a link between past and present people – is different from purely evidential value (above). Illustration depends on visibility in a way that evidential value (for example, of buried remains) does not. Places with illustrative value will normally also have evidential value, but it may be of a different order of importance.

Illustrative value has the power to aid interpretation of the past through making connections with, and providing insights into, past communities and their activities through shared experience of a place.

The historical value of places depends upon both sound identification and direct experience of fabric or landscape that has survived from the past, but is not as easily diminished by change or partial replacement as evidential value. The authenticity of a place indeed often lies in visible evidence of change as a result of people responding to changing circumstances. Historical values are harmed only to the extent that adaptation has obliterated or concealed them, made them illegible, although completeness does tend to strengthen illustrative value.

In the following texts the notes on historical value concentrate on the extent that there is evidence for time-depth typically visible within the HLC Type under consideration.

## Communal value

Communal value derives from the meanings of a place, or a type of place, for the people who relate to it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical (particularly associative) and aesthetic values, but tend to have additional and specific aspects.

Commemorative and symbolic values reflect the meanings of a place for those who draw part of their identity from it, or have emotional links to it. Such values tend to change over time, and are not always affirmative. Some places may be important for reminding us of uncomfortable events, attitudes or periods in our history. They are important aspects of collective memory and identity, places of remembrance whose meanings should not be forgotten. In some cases, that meaning can only be understood through information and interpretation, whereas, in others, the character of the place itself tells most of the story.

Social value is associated with places that people perceive as a source of identity, distinctiveness, social interaction and coherence. Some may be comparatively modest, acquiring communal significance through the passage of time as a result of a collective memory of stories linked to them. They tend to gain value through the resonance of past events in the present, providing reference points for a community's identity or sense of itself. They may have fulfilled a community function that has generated a deeper attachment, or

shaped some aspect of community behaviour or attitudes. Social value can also be expressed on a large scale, with great time-depth, through regional and national identity.

The social values of places are not always clearly recognised by those who share them, and may only be articulated when the future of a place is threatened. They may relate to an activity that is associated with the place, rather than with its physical fabric.

In the following texts the notes on communal value concentrate on the range of perceptions that communities and individuals typically have of the HLC Type under consideration.

#### **Aesthetic value**

Aesthetic value derives from the ways in which people draw sensory and intellectual stimulation from a place, or a type of place. Aesthetic values can be the result of the conscious *design* of a place, including artistic endeavour. Some aesthetic values are not substantially the product of formal design, but develop more or less *fortuitously* over time, as the result of a succession of responses within a particular cultural framework. They include, for example, the seemingly organic form of an urban or rural landscape; the relationship of vernacular buildings and structures and their materials to their setting; or a harmonious, expressive or dramatic quality in the juxtaposition of vernacular or industrial buildings and spaces. Many places combine these two aspects – for example, where the qualities of an already attractive landscape have been reinforced by artifice – while others may inspire awe or fear. Aesthetic values tend to be specific to a time and cultural context, but appreciation of them is not culturally exclusive.

In the following texts the notes on aesthetic value concentrate on the extent that historic character typically contributes to overall landscape character.

# **HLC Types texts**

(Text prepared in 1994/1996 and revised in 1998 and 2009 by Peter Herring)

# **Rough Ground**

## **Defining attributes**

Areas of rough grassland, heathland, and open scrub, usually on the higher or more exposed ground in a locality. The principal sources used when identifying this were the 1988 LIFE habitat mapping (held by the Environmental Records Centre for Cornwall and the Isles of Scilly) and aerial photographs. This Type can be subdivided according to its main locations, Upland and Coastal, and from the latter can also be distinguished those areas of Rough Ground on windblown sand: Dunes. The following text considers the variety in distinguishing features, typical history, components and management issues for each of these subdivisions.

#### **Upland Rough Ground**

Mostly found on granite or poorly drained and particularly exposed downland. Now distinguished mainly by habitat/ecology from surrounding enclosed or improved ground. The impact of human action is often underestimated and the Type is regularly regarded as largely 'natural' or 'wild'. In fact, it usually has the longest history of human interference/utilisation with its principal attribute, impoverished soil supporting essentially heath/scrub vegetation communities, usually being a product of prehistoric human intervention, which was maintained through medieval and early modern land use systems.

Four subdivisions of Upland Rough Ground can be defined (Herring 1998) and were identified in the Lynher Valley HLC (Herring and Tapper 2002) and in a more detailed review of the rough ground of west Cornwall (Dudley forthcoming):

- Upland Rough Ground which appears to have always been open, undivided by pasture boundaries and not enclosed and farmed. Often common land.
- Upland Rough Ground which is divided by long pasture boundaries. Often 'private' rough ground attached to single settlements.
- Upland Rough ground which has the remains of <u>prehistoric</u> field systems within it.
   These contain patterns of low stony banks and ruined structures and often have noticeably more varied vegetation communities, including more bracken. They are generally confined to the higher Moors like Bodmin Moor.
- Upland Rough ground which has the remains of <u>medieval</u> field systems within it.
   These contain patterns of low stony banks and ruined structures and often have noticeably more varied vegetation communities, including more bracken. They are generally confined to the higher Moors like Bodmin Moor.

#### Coastal Rough Ground

Unenclosed sloping ground beyond enclosed fields but above precipitous cliffs. A narrow band of land (from 50 to 800m wide) running along most stretches of the Cornish coast.

The semi-natural habitats here are still to a considerable extent the product of thousands of years of human activity, particularly summer grazing, turf-cutting and extractive industry. Now almost entirely neglected with very little grazing, although there have been various initiatives to reintroduce grazing to coastal rough ground in the last decade or so. Long distance coastal footpaths run through the Type which is therefore quite busy in the summer months.

Five subdivisions of Coastal Rough Ground can be defined and were plotted on the northern coast east of Polzeath as part of the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Val Baker 2003):

 Coastal Rough Ground (unenclosed/undivided), i.e. Coastal Rough Ground which appears to have always been open, undivided by pasture boundaries. Often common land.

- Coastal Rough Ground (enclosed/divided) Long pasture boundaries separate 'private' rough ground attached to single farmsteads.
- Coastal Rough Ground subjected to former non-agricultural land uses (usually industrial)
- Bare cliffs
- · Precipitous vegetated cliffs

Note that the ACVP project also defined HLC types for the different forms of rough ground found in the extremely steeply sloping valleys running down to the north Cornish coast (see Val Baker 2003).

#### Dunes

Areas of blown sand and shell deposits along low-lying stretches of the Cornish shore, principally on the north coast. Locally called towans. Marram grass holds together the seaward sides of Dune complexes while more mixed plant communities have developed on sheltered lees and dune-pastures have developed on lower dune-slopes. As in Upland and Coastal Rough Ground, this apparently natural habitat has been influenced and affected by human activity, mainly summer grazing of farm animals, and can be regarded as seminatural. The marram grass itself has been deliberately introduced to some Dunes to aid stability.

Within some Dunes are ruined mines (especially on the vast Perran Sands) and other now abandoned industrial complexes, the most dramatic and extensive being the explosive works at Upton Towans (near Hayle). These have altered the landform of this inherently mobile landscape. Other Dunes have and still are used for military exercises and are out-of-bounds for the public. Caravan and chalet parks and golf courses have also spread onto Dunes, considerably altering their character (as at Hayle and Bude). There are also often highly important prehistoric and medieval features and complexes buried beneath Dunes.

# **Principal historical processes**

# Upland Rough Ground

Environmental analysis confirms that woodland cover right up to the highest slopes in most parts of Cornwall was removed by early farmers in the Neolithic and Earlier Bronze Age periods (c4000-1500 BC). It is now increasingly accepted that the woodland had been a more open form of wood pasture rather than continuous dense forest (see Vera 2000), but nevertheless, its loss led to soil deterioration through nutrient loss and leaching. Iron pans, formed by leaching minerals, inhibited drainage. This and relatively wet and cold climatic conditions accelerated peat formation in later prehistory. All these processes (except the climate) can be either directly attributable to human action or closely associated with it.

Once vegetation had settled into its open, heathy form, probably by  $c1500\,$  BC, its use by farmers was mainly as extensive pastures and fuel-grounds – turf (peat) and furze. The rough ground was often organised into commons shared by several local farming communities and so maintaining an essentially open appearance, although some long pasture-dividing boundaries were created, especially in the Middle Bronze Age (mid second millennium BC), the later medieval period and in the last three or four centuries.

Upland Rough Ground was, until *c*1750, considerably more extensive; its enclosure by industrial labourers and by an expanding agricultural population in the 19th century, and its continued improvement by farmers with capital and machinery in the 20th century, has greatly reduced it (see Post-medieval Enclosed Land and Modern Enclosed Land).

# Coastal Rough Ground

Cornwall's cliffs have been utilised since at least the Bronze Age. Surveys have shown apparently Bronze Age cliff pasture dividing boundaries in west Cornwall and many cliff-tops have Bronze Age barrows. Many of the more dramatic Cornish headlands were isolated with ramparts and ditches in the Iron Age as 'cliff castles' but the cliffs' main use would have been as areas of summer grazing and as sources of fuel, principally furze but also, in poorly drained areas, turf (peat). These agricultural and domestic uses continued through the

medieval and post-medieval periods and into the first decades of the 20th century. Until the post-medieval period, most cliffs were undivided commons.

Some cliffs were the sites of mines, especially on the north coast, or quarries. Those looking out from cliff-tops to the sea have included, from at least the 16th century, generations of military men, coastguards, excise men, smugglers, and fishermen.

## Dunes

The Dunes themselves are post-glacial creations. There is still uncertainty concerning the date and rate of development but it is known that not all the Cornish dunes were created at the same time. South Cornish Dunes appear to be more recent (perhaps later medieval) than some of the major Dunes on the north coast (e.g. Iron Age and earlier inundations at Harlyn Bay, Constantine Bay, St. Enodoc and Gwithian), although even these continued to develop well into post-medieval times with medieval settlements, churches etc being overwhelmed.

An important historical feature of the development of Dunes is the succession of sand movements and stabilisation; a stabilised land surface may be used for pasture, cultivation and settlement before being sealed by a further sand blow, the surface of which may in due course become stabilised and again used for pasture, cultivation and settlement. In places (e.g. Gwithian), successive buried land surfaces with their associated settlements and fields can extend from the Early Bronze Age through to the medieval period. Evidence for the more recent episodes of use is not always obscured by sand – apparently medieval field boundaries survive at Perran Sands, isolated or ruined medieval churches at St. Enodoc, Perranzabuloe and St. Constantine.

Miners cut through Dunes to reach copper and tin lodes in the 18th and 19th centuries and an explosives manufacturer made use of the broken relief and soft ground to establish a major factory at Upton Towans in the 19th and early 20th centuries.

In the second half of the 20th century, extensive caravan and chalet parks and golf courses have been established on sand dunes around Hayle, Perranporth, west of Padstow and at Summerleaze Down, Bude on the north coast and at Praa Sands and Pentewan on the south coast. People have been attracted since the later 19th century by the long sandy beaches which edge most Dunes.

# Typical historical and archaeological components

#### **Upland Rough Ground**

The semi-natural vegetation community is the most immediately visible component of this Type but there is also usually a wealth of archaeological remains, many of which may be fairly ephemeral, not making a significant impact on present landscape form. Others, however, are highly visible and catch the eye; for instance, hill-top Bronze Age barrows, long post-medieval pasture boundaries, and areas of turf-cutting.

In Cornwall generally, prehistoric sites and complexes are generally best-preserved in Upland Rough Ground and can comprise complete Bronze Age ritual/ceremonial monuments (long barrows, chambered tombs, round barrows, stone circles, stone rows, standing stones etc) and apparently coherent groups of these. These are sometimes sufficiently well preserved to establish that certain natural features, like tors or streams, were incorporated by prehistoric people into their ritual complexes.

Transhumance huts, the shelters used by seasonal pastoralists from the long period of common grazing, survive on Bodmin Moor and there are remains of peat cutting including the little platforms the dried peat was stacked on.

More recent components include pasture boundaries, usually laid out as commons were 'privatised' in the post-medieval period. Industrial remains often survive well on Upland Rough Ground and the extensive disturbance of some tracts has inhibited later agricultural improvement. Quarries and mines form important components of certain areas of Upland Rough Ground.

There are few medieval or modern settlements and tracks and roads are usually open (not hedged).

## Coastal Rough Ground

The heathy or impenetrable scrubby vegetation that dominate most cliffs has developed after several decades of neglect. Until its abandonment by farmers, vegetation would generally have been herb-rich rough grassland; the hundreds of late Victorian and early 20th century photographs taken of Cornwall's coast confirm this.

Archaeological sites on Coastal Rough Ground are generally less varied than in Upland Rough Ground, as this has always been strictly marginal land. Ritual/ceremonial sites of the Bronze Age, mainly barrows, are dotted along the coast, especially on the higher cliff-tops of the north coast. Cliff castles are mainly in the western half of the county and industrial remains are where the ores or workable slates and stone lie. All of these types of site are generally well-preserved, there having been little or no intensive activity subsequently.

The pastures do have a few prehistoric or medieval dividing or cliff-edge walls (the latter to stop slipping stock), but most are post-medieval, the products of privatising commons.

Cliff-tops have been encroached upon by fields as farmers took their cultivated land beyond present margins. The abandoned edges of prehistoric and medieval field systems survive in good condition on some cliff-tops.

Military sites are often found on cliff-tops, from look-outs to pill-boxes, batteries to radar stations and forts. There are also look-outs and lighthouses; and fishermen built huers' huts from which to watch for shoals. Tracks, including crazily precipitous paths, led down cliffs to fishing rocks and smuggling coves.

#### Dunes

The semi-natural vegetation is partly created by grazing and deliberate planting. Dunes are generally rich in buried archaeological remains. These are usually well-preserved, the Dunes being non-acidic, and may date back to the Bronze Age. As such they are of the highest importance, as demonstrated by excavations at Gwithian.

Modern caravan and chalet sites dominate many Cornish Dunes but the remains of early industry are also visible and medieval churches and chapels have been revealed; that at St. Enodoc is one of the strangest, sitting in a rectangular graveyard in the middle of a modern golf course.

Industrial and early recreation sites survive well.

# **Principal locations**

## **Upland Rough Ground**

The most extensive areas of Upland Rough Ground are on Bodmin Moor, the flatter downlands on the serpentine of the Lizard peninsula and in West Penwith. There are, however, smaller more isolated patches throughout the granite areas of the county, including on Hinsgston Down, in the Hensbarrow area, and on the Carnmenellis and Tregonning/Godolphin granite. Smaller patches again are found on certain particularly exposed hills like St Agnes Beacon.

## Coastal Rough Ground

Almost the whole of Cornwall's coast is fringed with Rough Ground although there are a few places where improved field systems come right to the edge of precipitous cliffs, and there are many interruptions for coastal settlements, recreational, military and industrial complexes.

# **Dunes**

The most extensive Dunes are on the north coast, at Lelant, Hayle, Gwithian, Perran Sands, Constantine and Harlyn Bay, Widemouth Bay and Bude. Smaller areas on the south side are found at Whitesand Bay (Sennen), Marazion, Praa Sands, Gunwalloe, Mullion, Kennack, Pentewan and Whitesand Bay.

# Variability

## **Upland Rough Ground**

Forms of semi-natural vegetation communities vary between lands with different underlying geology and soils, notably between the granite uplands and the serpentine of the Lizard. Within these, there is also variability due to differing grazing regimes, especially between

relatively heavily grazed commons and less heavily grazed privately held rough ground. The forms and patterns of archaeological remains also vary, partly due to relative marginality of the ground, and partly due to the existence of various forms of mineral and quarry material that could be extracted.

#### Coastal Rough Ground

As in Upland Rough Ground, the forms of semi-natural vegetation communities vary between lands with different underlying geology: granite, metamorphic, serpentine and sedimentary rocks all support different mixes. Within these, there is also variability due to differing grazing regimes; an increasing number of areas are being subjected to conservation grazing with hardy animals, reintroducing variety to cliff-scapes. Forms and patterns of structures and archaeological remains also vary, partly due to relative marginality, and partly due to the existence of various forms of mineral and quarry material that could be extracted.

## <u>Dunes</u>

This depends to some extent on the age of the Dunes and thus the date and form of historical features both beneath and within them.

## Past interaction with other Types

## **Upland Rough Ground**

Upland Rough Ground in Cornwall contains few post-prehistoric settlements and is a Type which has been dependent on use by occupants of other neighbouring Types for the last 3000 years (since a range of forces around 1000 BC contributed to a general abandonment of the uplands as permanent settlement areas). Most notably, farmers living in the Anciently Enclosed Land used it for their summer grazing grounds and it was also a major source of fuel (turf and furze) and stone. As such it was of critical importance to traditional agricultural communities. Where close to the coast, the Upland Rough Ground was used as rough grazing in conjunction with Coastal Rough Ground and Dunes.

The loss of large areas of Upland Rough Ground to enclosure in the last 300 years has greatly diminished the impact of the once coherent mixed agriculture landscape on the present Cornish countryside. A great deal of the Post-medieval and Modern Enclosed Land Types have been taken from Upland Rough Ground and their distribution indicates the previous extent of summer grazing; many parishes whose land is now wholly enclosed once contained significant amounts of Upland Rough Ground.

#### Coastal Rough Ground

Pasture dividing and cliff-edge boundaries survive well, as do the various industrial, military, coastguard and fishing complexes. Their various components can be easily and clearly related to each other.

Like Upland Rough Ground, the land use in Coastal Rough Ground was normally dependent on that in other neighbouring Types, principally Aciently and Post-Medieval Enclosed Land. As summer grazing and fuel grounds, the cliffs formed an essential element of the mixed farming landscape often alongside Upland Rough Ground. Some coastal farms, such as those in Zennor, were ribbon-shaped to ensure that they possessed a share of both upland and cliff-top grazing as well as arable land.

The watchers who used cliff-tops passed messages along to neighbouring military installations, to neighbouring coastguards, Excise Men etc or to local seine fishing boat crews. Many of their sites survive and these flickering communications can be reconstructed in the minds of imaginative visitors.

Tracks which led out from enclosed land onto the cliffs, linking cow and sheep, furze cutter, copper miner and slate cutter to their homes inland still survive.

# <u>Dunes</u>

Dunes overwhelmed some areas of Anciently Enclosed Land and then became the summer grazing ground for farms in other areas. The relationship between these Types was until the early 20th century close and this can still be appreciated as the boundaries between them are soft and blurred. Recreation areas are often directly superimposed onto Dunes.

#### **Evidential value**

#### **Upland Rough Ground**

Great potential for further research. Archaeological and historical studies of remains will yield much valuable information, as will palaeo-environmental work, particularly that investigating the ancient pollen preserved in bogs. More work could be done on the long-term relationship of Upland Rough Ground with Anciently Enclosed Land. This could be seen as a model for sustainable future relations.

# Coastal Rough Ground

Recent surveys of National Trust and Cornwall Wildlife Trust coastal properties have increased our knowledge of the history and archaeology of this Type considerably. There are, however, long stretches for which documentation is sketchy. As for Upland Rough Ground, there is good potential for a better understanding of historic relationships between Coastal Rough Ground and Anciently Enclosed Land informing more sustainable future land use.

Survey, excavation and analysis of the well-preserved archaeological sites will yield valuable information about past land use. Coastal peat bogs do exist and palaeo-environmental information will survive.

#### Dunes

Archaeological sites within Dunes possess considerable potential. Dunes are likely to contain the best-preserved prehistoric and medieval settlements in lowland Cornwall and to have the best survival of bones, both animal and human. Study of dune formation and local environmental/climate history is important as is study of the more recent use made of Dunes by local farming communities. The Gwithian Dunes were subjected to detailed archaeological excavation in the 1950s; key aspects have recently been published (Nowakowski *et al* 2008). Palaeo-environmental work has been undertaken on some Dunes.

#### Historical value

In most Cornish areas of Upland Rough Ground, there are palimpsests of the remains of up to 6000 years of human activity with the increasingly extensive use of uplands, from arable to rough grazing to (in some cases) relative neglect, ensuring the survival of most of the remains of previous episodes.

#### Coastal Rough Ground

As for Upland Rough Ground, survival of remains from the earliest period of use (at least the Bronze Age) is generally good because subsequent use has usually been extensive and non-destructive.

## Dunes

This is often difficult to establish as Dune surfaces have changed so often. Surviving features tend to be isolated and unrelated except when in industrial/recreational complexes. Excavations reveal earlier phases and sand blows reveal sections showing layers of old land surfaces interspersed with layers of sand; vividly demonstrating time-depth.

Medieval churches and chapels give an insight into the existence of a different earlier landscape, now buried.

# Communal value

#### **Upland Rough Ground**

Upland Rough Ground dominates the areas where it survives and the historical components, principally the semi-natural vegetation, are fundamental to its overall and particular appearance. Upland Rough Ground makes a larger contribution to local and wider perceptions of areas of Cornwall than any other Type. Changes to this Type tend to be met with greater concern than changes elsewhere.

# Coastal Rough Ground

Much visited, mainly via the South West Coast Path, and much loved. Most people would probably be surprised to learn how much human activity took place on the Cornish cliffs up to

the early 20th century. As the boundary between the sea and the land, the Coastal Rough Ground has considerable psychological and mythic meaning and value for historically-aware Cornish people. Buildings and structures relating to watching the sea (lighthouses, huers' huts, military installations etc) dot the cliff-line and long, now usually overgrown, pasture boundaries rush down the steep slopes to the cliff-edge. Observant visitors will always be able to see some historic features, even on the wildest, most windswept stretch.

#### Dunes

Dunes are often regarded as exciting wildernesses often tainted by modern caravan/chalet/golf course developments. Relatively few people appreciate how the Dunes once fitted into local farming economies or were the sites of industrial enterprises.

#### **Aesthetic value**

Upland and Coastal Rough Ground and Dunes all contribute greatly to the present landscape character of their parts of Cornwall. Archaeological components within them are often particularly attractive and evocative.

#### Potential for amenity and education

#### **Upland Rough Ground**

Considerable potential. Walkers and riders already make wide use of Cornwall's various uplands. Many visit the more famous and accessible archaeological sites.

Educational potential is also great, not just through studying historical sites and features and semi-natural habitats, and the relationships of this Type with other parts of Cornwall, but also through the liberating experience of moving around relatively unenclosed and unimproved countryside.

## Coastal Rough Ground

Great. There are very few unspectacular Cornish cliffs. The semi-natural vegetation is itself of interest to many people, supporting insects, birds and mammals. Many people visit the more famous archaeological sites and could be encouraged, where safe, to visit more. Footpaths lead onto cliffs from inland farms, demonstrating the links between Coastal Rough Ground and other parts of Cornwall.

# **Dunes**

Good. Recreation has thus far used Dunes mainly as adjuncts to desirable beaches or as bunker-filled golf courses but there is potential for encouraging the appreciation of the Dunes themselves; their flora and some of the industrial and earlier sites within them (as is happening, for example, at Upton Towans explosives works near Hayle).

# Survival

#### **Upland Rough Ground**

Archaeological features survive well because the Type has been used increasingly extensively through time. Subsequent land use tends not to have damaged or destroyed earlier features. Archaeological remains are generally well preserved, but in areas no long grazed they can be overgrown with gorse, scrub, secondary woodland, etc, all of which can damage below-ground remains through the action of roots and rhizomes. The loss of so much Upland Rough Ground in the last 2-300 years to Post-medieval and Modern Enclosed Land has had a major impact on a once much more extensive historical and archaeological resource.

#### Coastal Rough Ground

Generally good as most cliffs have been difficult to improve agriculturally but as the cliffs are increasingly neglected, many archaeological sites are becoming obscured and potentially also damaged by dense vegetation.

## <u>Dunes</u>

Apart from recreation and industrial complexes, there have been few damaging developments in Dunes and features therefore generally survive well.

## **Vulnerability**

## **Upland Rough Ground**

Most blocks of Upland Rough Ground are protected by various designations. Many are within the Cornwall Area of Outstanding Natural Beauty; most contain extensive SSSIs. Many farms containing Upland Rough Ground have signed up for Agri-Environment schemes.

#### Coastal Rough Ground

Subject to numerous protective designations. Long stretches are SSSIs, much (approximately one-third of Cornwall's coastline) is either owned by or covenanted to the National Trust, and most falls within the AONB.

#### Dunes

Widely protected as SSSIs due to their ecological value. Many Dunes also fall within the AONB or other designated areas and some are owned by the National Trust.

## Forces for change

The continuing reduction in farming population and consequent amalgamations of holdings has far-reaching implications. Structures, boundaries and traditional practices become redundant as regimes become more specialised and intensive, leaving marginal and extensively worked areas, such as Rough Ground, vulnerable to neglect. On the other hand the principle of cross compliance in which environmental gains are sought in exchange for the Single Farm Payment (that has replaced production subsidies) is encouraging farmers to care for aspects of the natural and historic environment on their land. Agri-environment programmes such as Environmental Stewardship are also major forces for change although aspects of the prescriptions for these are designed at the national scale and can lead to locally inappropriate regimes and recommendations.

Neglect and reduction of summer grazing leads to habitat impoverishment through the domination of certain vegetation types which also obscure archaeological features. Roots of shrubs and trees and rhizomes of bracken will adversely affect below-ground remains. Seminatural communities (plants, insects, birds and mammals) that are, to an extent, culturally defined are also simplified and distorted by the reduction or suspension of grazing. Historical associations of particular species with particular places, such as the golden plover on parts of Bodmin Moor, are consequently threatened, in the same way that the chough and the Large Blue butterfly both became temporarily extinct on Cornwall's coasts when grazing ceased in the twentieth century.

With large areas of Cornwall's rough ground owned by either environmental bodies or agencies (National Trust, Cornwall Wildlife Trust, Cornwall Heritage Trust, Natural England, etc) or large estates that have entered into agreements with Natural England, and much of the remainder in the hands of farmers who have also entered into Environmental Stewardship, most is now subject to some form of formal management planning.

Climate change may be expected to impact on rough ground. Some species may be expected to struggle while others, like European gorse and bracken, thrive, leading to changes in balance of established mosaics of land cover. If summers become hotter and drier then peat may dry out with consequences for land cover (and for currently waterlogged and therefore well-preserved remains), and there may be greater risk of summer fires.

As well as the direct impacts of climate change there are those that develop as agencies and individuals respond to its threats. In addition to installing renewable energy complexes on rough ground, these may include capital works and changes in land use designed to improve the performance of rough ground in relation to carbon release and carbon storage. Analyses of the broadly defined but carefully measured ecosystem services that particular semi-natural habitats may provide can stimulate alterations in management that affect other aspects of these places, such as the cultural, archaeological and agricultural. For example, peat, found largely in Rough Ground, is important for holding carbon; one way of reducing the speed of climate change may be to manage rough ground primarily to maximise the carbon-storage service its peat provides, over-riding other more traditional ways of managing rough ground.

#### **Upland Rough Ground**

Continued agricultural improvement, especially at the edges of Upland Rough Ground, can be expected. Road schemes and other developments do not entirely avoid the Type. The growth of historically and ecologically aware interest groups and the steady appreciation by farmers and landowners of the ways that the wider community values the uplands is a positive force for conservation.

## Coastal Rough Ground

There are few forces for negative change beyond a minimal encroachment by farmers and an expansion onto certain cliffs of recreation facilities (e.g. caravan/chalet parks). The use of cliffs by long-distance walkers will continue to increase and so the place will become more widely valued; there are some problems of erosion that require careful management to contain.

#### Dunes

The main threat to Dunes appears to be from the expansion of recreation facilities. Most Dunes are now fairly stable, thanks to the planting of marram grass. There is little likelihood of loss to agricultural expansion, road provision or housing.

## Safeguarding the Type.

## **Upland Rough Ground**

Grazing is important for maintaining the variety of semi-natural communities and keeping archaeological remains visible for people to explore and undamaged by roots and rhizomes. Further agricultural improvement should be actively discouraged, at the same time as more sustainable (generally traditional) land use and management is encouraged. Hedges and walls should be repaired/maintained, but not wholly rebuilt (as dismantling damages or destroys their fabric). Lanes should be kept open and bracken and European gorse domination reduced.

Agri-environmental schemes could be of considerable benefit to local farming communities as well as to the highly important habitats and archaeological remains there. Loss of Upland Rough Ground to road schemes, conifer plantations, reservoirs, and other developments should be resisted. The values of Upland Rough Ground should be always in mind when considering applications for guarries, mines or china-clay workings to either open or expand.

## Coastal Rough Ground

Reintroduction of summer grazing to recreate variety of land cover and the open character of Cornish coastal rough ground. The National Trust and Natural England have been reintroducing cliff grazing with good results over stretches of its coast and other bodies should be encouraged to follow suit. Further loss of Coastal Rough Ground to agriculture (e.g. ploughing to cliff-edges), recreation and other development should be resisted.

#### **Dunes**

Historical and archaeological sites can be more closely studied and carefully presented as a means of raising awareness of the historical element of what is often perceived to be a natural environment. The combined ecological and historical significance of Dunes should be borne in mind when considering expansion of recreation sites or developments and presumptions should be made in favour of conserving these very important places. Continued monitoring of Dunes is also important; particularly the prevention of erosion.

## Woodland

## Introduction: defining/distinguishing attributes

This type comprises mainly the remnants of traditionally managed woodlands, usually found in the steep-sided valleys extending inland from creeks or coves, or in some cases via tributaries. It also incorporates all other 'woodland' recorded by the Cornwall Wildlife Trust for the Cornwall LIFE survey (held by the Environmental Records Centre for Cornwall and the Isles of Scilly). The mapping of ancient woodland follows that of the habitat mapping undertaken by the CWT for the Cornwall LIFE survey. This was itself influenced by the mapping of 'Ancient Semi-Natural Woodland' undertaken for the whole county by the Nature

Conservancy Council in 1986 (Lister and Walker 1986). Some secondary woodland would have been included (due to the imprecision of the documentary sources used) and some small patches will have been omitted (the NCC mapping being restricted to woodlands of 2ha or more). Many of the ancient woods have been replanted in the later twentieth century with conifers (see also HLC Type, Plantations).

It should be noted that many so-called ancient woodlands are probably not as ancient as many historians and ecologists believe. The sealing of woodlands with stock-proof boundaries, keeping grazing livestock out of them while trees matured, is probably largely a post-prehistoric development (although there is some evidence from places like the Somerset Levels for Bronze Age management of woodland, forcing stems to grow tall and straight). Ecological, palaeo-environmental and archaeological evidence is increasing to support Franz Vera's hypothesis (2000) that in prehistoric times grazing animals would have had access to most woods and would have kept them relatively open, leaving them with the character of wood pasture or parkland: mainly scattered trees, large glades and only small clumps of dense woodland. The implications of this are profound, not least for ecologists: much more light would have entered woodlands and supported lichens, invertebrates, fungi, mosses etc that have struggled to survive in the denser and darker historical woodlands.

For the Lynher Valley project woodland was subdivided into four sub-types, the second being taken directly from the LIFE project mapping (see Herring and Tapper 2002).

- Woodland (deciduous).
- Ancient Semi-natural Woodland (ASW)
- ASW replanted
- ASW cleared

The slopes of the steep-sided valleys that also contain woodlands have relatively little ancient enclosure. Roads either run along the tops or bottoms of these valleys or cross them by zigzagging routes with fords (now usually bridges). Settlements are rare, and usually confined to their floors. Most relate to either routeways or to processing industries (mills etc).

## Principal historical processes

The surviving ancient woodlands would have been managed and have formed important elements of the working landscape for many centuries, some probably from prehistoric times (see Rackham 1976 for discussions of typical uses and processes). Certainly, medieval farmers and craftsmen would have exploited them as pasture grounds (underwood), sources of fuel, coppice wood (including barking of oak for the tanning industry) and timber. Communities in neighbouring mining regions would also have had close relationships with woods, again from at least the medieval period, needing both timber (trunks and main branches for structures and props) and charcoal (for smelting). Woodlands, whose early medieval distribution predominantly in the steeper valleys of Cornwall was probably established in later prehistory, were gradually lost to agricultural clearing and enclosure (as well as other minor uses) on the less steep valley sides from the later medieval period into the 19th century. Few valleys, however, lost their tree-cover entirely. Many Domesday (1086) estates had extensive areas of woodland and there are also numerous later medieval references to woodlands. The steep-sided valleys in which most ancient woodland is found often formed estate and parish boundaries (the stream or river usually being the precise bound) as these deep cuts carved Cornwall into discreet blocks of agricultural land. Woodlands are therefore often on the least often visited margins of holdings.

Communications networks found valleys both convenient and problematic. Local routes in Cornwall were often steered along valleys, either along crests or more often along their bases as these provided relatively level courses. Medieval bridges are at the feet of steep, sometimes zig-zagging and deeply hollowed roads.

Streams and rivers had leats taken off them from at least medieval times to work the water mills used in grinding grain, stamping and blowing tin, and fulling cloth.

Some 18th and 19th century country houses used the opportunities presented by already wooded slopes to establish ornamental parks and gardens in these valleys.

## Typical historical and archaeological components

The semi-natural woodlands are themselves historical components, having been carefully managed from prehistoric times, although the Vera hypothesis suggests that prehistoric woodlands were probably more open than historic ones, from which livestock were excluded. Within the woods can be found woodland banks, woodsmen's tracks, charcoal-burners' platforms (circular platforms *c*6m diameter terraced into hillsides) and woodsmen's cottages.

Communications systems, notably roads, have left their distinctive remains; fords, bridges, public houses, roadside smithies, wheelwrights etc. The rivers and streams of these valleys have been exploited since the later medieval period as sources of water power for corn and grist mills serving local farming communities.

#### **Principal locations**

There are valley woodlands in most parts of Cornwall, though there are fewer in the west and more in the east, and especially in the deeper valleys of south-east Cornwall.

## Variability

Some woods, especially coppices used for charcoal and tanning, are predominantly of oak, but others (notably in the east) include other species, usually deliberately planted, such as Sweet Chestnut.

## Past interaction with other Types

The woods were used by inhabitants of the neighbouring Enclosed Land. Mills were used by farmers from the surrounding farmlands and the roads which ran along valley bottoms or crossed them, took them and their produce to market from at least the medieval period.

#### **Evidential value**

Woodlands and communications networks will repay historical and archaeological research especially if it concentrates on their roles in relation to the surrounding farmland and local industries. Woodlands have been particularly neglected in recent years and are therefore likely to contain some particularly well-preserved remains. Further research on the implications of the Vera wood pasture hypothesis is urgently needed, to feed into ecological as well as historical understanding.

## Historical value

Enclosures from woodlands are clearly visible and within surviving woods many now redundant features are also visible – banks, tracks, charcoal burners' platforms etc. The trees themselves reveal aspects of their former management by coppicing, pollarding, shredding, and the age structure of the trees within woodlands help us see how closely they were once managed.

#### Communal value

Woods are particularly appreciated in Cornwall, which now has relatively few trees. Most rural communities had (and often retain) access to particular named woods, and individuals and families will be known for their associations with woodland work. Children, especially, still enjoy the wild pleasures that can be enjoyed in woods, reinforcing personal and communal associations with them.

## **Aesthetic value**

Woodland contributes much to general landscape character, adding darkness and texture and, being often on the edges of territories or holdings, forming a strongly visual and highly legible historical framework containing the patterns of other land uses.

#### Potential for amenity and education

Access to certain woodlands could be increased and the presentation of their historical aspects improved. On the whole though, the constraints of topography and property boundaries make presentation of features in this Type rather difficult.

#### Survival

The ancient woodlands have been nibbled away from the medieval period to the 19th century. Most valleys, however, are relatively quiet and features survive well.

## Vulnerability

Many valleys have either national or county designations (AONB, SSSI, AGLV etc). The steep sides of valleys are themselves constraints to many forms of damaging development.

# Forces for change

While woodland on steep valley slopes can be expected to become increasingly neglected (partly due to the difficulties of gaining access fro modern silvicultural machinery), there is likely to be increased pressure for the planting of new woodland, both because of the several funded schemes for doing so and because of the likely increased demand for wood fuel. If such planting is guided by an understanding of the known or likely sites of earlier woodlands, i.e. largely within steep valleys in Cornwall, this should be a relatively benign force for change.

## Safeguarding the Type

Encourage retention of broad-leaved woodland. There is potential for replanting broadleaf woodland on steep slopes in valleys. Such a process of replanting will not only enhance the historic landscape character of the valleys but will also improve their biodiversity, and help reduce the velocity of water, silt and nutrients throughput.

#### **Plantations**

## **Defining attributes**

Blocks of mainly conifer plantations, their locations derived from LIFE mapping (held by the Environmental Records Centre for Cornwall and the Isles of Scilly), OS mapping and aerial photographs. Often beyond the crests of steep-sided valleys and creeks (the more typical locations of Cornwall's older woods). Several are on the sites of more ancient woods (i.e. PAWs, Plantations on Ancient Woodlands, a type mapped by Natural England).

## **Principal historical processes**

Three very distinct historical processes have produced the conifer-dominated plantations of Cornwall. Those on the uplands are mainly of the second half of the 20th century and were planted by the Forestry Commission or other private groups as part of a drive to produce timber for the nation after the depredations of the Second World War. These were regarded as strategic resources, the lack of which made the UK vulnerable at time of war; such plantations may be considered military-related landscape. Others were replantings (again mainly in the second half of the 20th century) of ancient woodlands which had been intensively harvested either in or immediately after the War. Many were plotted during the Nature Conservancy Council (now Natural England)'s survey of ancient woodlands in Cornwall as PAWs (Lister and Walker 1986). The third plantation type is that of those created partly as elements of designed landscape. Some of the best Cornish examples of this kind are found at Trebartha in North Hill, planted by the Rodds (late 18th and 19th centuries) and then the Lathams (from the mid 20th century). Many in this last group are included within the Ornamental HLC Type.

## Typical historical and archaeological components

The new conifer plantations generally form simple landscape; blocks of firs, larches, spruces and pines planted in rows, often on parallel banks created by deep chisel ploughs and separated into rectilinear blocks by fire breaks and access tracks. There are also usually drainage ditches and fences and some have picnic areas, installed in recognition of their amenity value. Recent work by Dave Hooley of English Heritage and Jenny Kestle (1999) on Smallacoombe Downs has shown how well granite-walled prehistoric and medieval features, and other historic features, can survive in conifer plantations provided there has not been extensive soil preparation. Some modern plantations are mixed conifer-boadleaf with willows, oaks etc typically planted around their edges to enable the plantations to blend into the Cornish landscape more unobtrusively.

In the replanted older woodlands, remains of pre-conifer features often survive, often in fragments; earlier wood-banks, tracks, charcoal-burners' platforms etc. Plantations replacing ancient broadleaf woods tend to have less rectilinear edges and therefore are more sympathetically moulded into the local topography. More effort has usually been made here to provide fringes of broadleaf trees, to allow the plantations to sit more comfortably in anciently enclosed land. Some of these plantations are represented as mixed conifers and broadleafs on modern OS maps.

## **Principal locations**

Mainly in the eastern half of the county, often in large blocks and often on exposed ground or steep valleys (such as in the eastern half of Bodmin Moor, around Dunmere and Cardinham and in the Tamar Valley).

#### Variability

See historical processes, above.

## Past interaction with other Types

The ancient woodlands will have been incorporated into rural economies in medieval and early post-medieval periods and will thus have had direct relationships with neighbouring Types.

Modern conifer plantations, on the other hand, produce wood for the national economy and are not always managed or exploited by local communities. The plantations are also imposed onto other Types which are normally regarded, in terms of historic landscape character, as being more significant, in particular Upland Rough Ground.

#### **Evidential value**

The re-planted ancient woods, as noted above, were important parts of the rural economy and their study will throw light on medieval and early post-medieval Cornwall. Archaeological features will survive in most and their recording and interpretation will also be valuable. The Bodmin Moor plantations have been included in the second volume of the Bodmin Moor archaeological survey (Herring *et al*, 2008). The Smallacoombe Downs work by Dave Hooley of English Heritage has demonstrated that there can be nationally important archaeological remains surviving beneath the conifers in upland plantations.

#### Historical value

Fragments of earlier woodland features can be identified in the reused ancient woodlands and in some modern conifer plantations in what was previously Upland Rough Ground, Scheduled Monuments are left as unwooded islands in a sea of dark trees (e.g. at Trewortha Marsh and Smallacombe on Bodmin Moor). Boundaries of earlier field systems can often be detected, sometimes in damaged form, within woods as can the more substantial remains of industrial features,. In general, however, there is little easily visible evidence of time-depth in conifer plantation.

# Communal value

Because they are so substantial, being both dark and prominent, the great 20th century plantations on rounded hill-tops which catch the eye in preference to more muted and subtle features in their vicinity, tend to be little loved. There are, however, champions of the beauty and atmosphere of conifer plantations. Some have public access and are appreciated by those who visit. Children enjoy their darkness and there are some ecological benefits (although most would accept that these are outweighed by habitat loss).

#### Aesthetic value

Plantations make a significant contribution to the present landscape character. They can be looming presences, which most people know have either obscured or damaged more beautiful, more ecologically varied, and more historically interesting blocks of the landscape.

## Potential for amenity and education

More potential for amenity than education, although detailed historical and archaeological studies of ancient woods will be of value for education as children and adults can safely explore the past and present in strange and exciting places.

#### Survival

Generally complete; the trees themselves are, of course, cropped when mature. Most early features associated with ancient broad-leafed woods will have been fragmented by modern reuse.

## **Vulnerability**

Most plantations receive no direct protection, although some are within designated areas, notably the AONB.

#### Forces for change

Continued conifer management (thinning, cropping, re-ploughing etc) will gradually erode the surviving features of ancient woods and earlier archaeological remains.

#### Safeguarding the Type

Develop a county strategy to guide the location and form of new plantations, including short rotation coppice. Introduce more variety, particularly via broadleaf trees, and especially in the plantations established in more ancient woods. Enhance enjoyment of woods to which the public has access by undertaking historical and archaeological research.

#### Intertidal and inshore water

# **Defining attributes**

The ground between high and low water marks on the seashore and in tidal estuaries. Although now essentially sand, silt, mud or rock, this can contain important archaeological remains either at surface (e.g. quays, breakwaters) or buried (e.g. old land surfaces, overwhelmed quays). Inshore waters, to the 12 mile national limit are included as there are important permanently submerged archaeological features here; not just wrecks but also so-called 'submerged forests' etc. NB The 1994 Historic Landscape Characterisation did not systematically plot intertidal mudflats; instead they were subsumed within other HLC Types (especially the now defunct Type Navigable Rivers and Creeks, from which the text here is largely derived). They have been recorded in the more detailed secondary HLCs in the Lynher Valley and the ACVP area of the northern coast.

The type was subdivided into five subtypes in the Lynher Valley HLC and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Herring and Tapper 2002; Val Baker 2003):

- Intertidal mudflats
- Saltmarsh
- Inshore water
- Beach
- Rocky Foreshore

#### Principal historical processes

Most human activities that have left remains in this Type were connected with maritime affairs but there will probably also be prehistoric material from periods as late as the Bronze Age when land that is now inter-tidal was dry ground. These would include remnants of so-called 'submerged forests' and, potentially at least, archaeological remains (artefacts and structures) left by people who lived and worked there.

It seems likely that there were once many more creeks, especially along the southern coast. Several have clearly been silted up – Seaton, Pentewan, Porthluney – and the Cober was trapped as Loe Pool when the Bar was thrown up. Roman coin hoards are often found near the heads of extant or former creeks. The rough grassland covered twice daily on the edges

of many creeks, known as saltings, were important for sheep grazing from medieval to post-medieval times.

Medieval and post-medieval sea traffic and local estuarine and sea fishing brought life and busy activity to many of the coastal villages. Quays and wharves fronted settlements such as Boscastle, Port Isaac, Polperro and Mousehole. These were busy until the late 19th and early 20th centuries, but from the mid-20th century were used mainly for fishing and pleasure-boating.

There have been numerous wrecks along the Cornish coast. No less than fifteen ships were wrecked by a storm on a single day in August 1752, all between Mouls Island (off the Rumps) and Tintagel. Fragments of wrecks can be spotted from cliffs along the length of the coast.

Beach-orientated tourism developed along the Cornish coast in the second half of the nineteenth century and now contributes greatly to one of Cornwall's main industries.

# Typical historical and archaeological components

Buried prehistoric land surfaces (associated with the 'submerged forests') may contain palaeo-environmental evidence (macro- and micro-fossils, pollen etc), as well as human artefacts. Palaeo-environmental evidence can relate to an area's vegetation history or to the processes of submergence and coastal or estuarine change.

The silts in the creeks and valleys are themselves historical features, incidental products of mining and farming upstream.

The historical use of reed beds is indicated by their being named from associated settlements and by trackways (usually now redundant) leading down to them.

Tide mills, used mainly for grinding corn, are another fairly rare feature of this Type. Large embanked pools survive and in some cases structural fragments of the mill houses whose large undershot waterwheels exploited the power of the gradually released tidal waters.

## **Principal locations**

The whole of Cornwall's coast is, of course, intertidal. Most creeks are on the south coast (though there are exceptions: Hayle, Gannel, Camel, Valency and Neet).

## Variability

The southern creeks tend to be longer and fuller of quays, harbours and their remains than those on the north coast, reflecting the more intensive use of this coast for trade etc. Submerged forests are found on both coasts.

# Past interaction with other Types

Quays, ferries, warehouses, factories and limekilns linked Types. Farmers, millers, quarrymen, and miners used the quays, warehouses and factories; travellers of all kinds, from all HLC Types, used the ferries, lanes and hostelries, and lime-kilns from the 17th century produced the soil-sweetening lime used by farmers far inland. Tidal mills were also normally used for grinding grain for local farmers.

The inter-tidal Type was the interface between people and the sea and activities involved either exploiting the sea by fishing, shipping etc or protecting other features from it.

#### **Evidential value**

There is great potential for both archaeologist and historian to get to grips with medieval and early modern trading and commerce within this HLC Type. More detailed recording of the great variety of important features will also help in the management of a Type for which there is considerable public interest. There is much that can be learnt from the study of Cornish harbours, both extant and ruined. Knowledge of levels of investment into structures, together with their capacity, mode of use etc can inform the history of maritime Cornwall.

The potential for understanding prehistoric Cornwall, from Mesolithic to Bronze Age times and, in particular, its climate and environment, from the careful study of submerged forests and buried soils is considerable. Research on tin-streamers' silts has been initiated and results should shed light on the history and even prehistory of tin extraction in Cornwall's valleys.

Document-based histories of Cornish ports and harbours have appeared and there is some good and imaginative work on coastal wrecks but little work has been done on the physical remains of harbours etc. Tidal mills have not received the close study they appear to deserve. The Royal Commission on Historic Monuments in England is compiling a list of wrecks (over 4,000 in Cornwall and Scilly) and some are being mapped from aerial photographs in the National Mapping Programme. Maritime archaeology, often dependent on diving, is becoming increasingly sophisticated.

#### Historical value

Sequences of features are often detectable in busy parts of this HLC Type; lines of posts running through mudflats, fragments of wooden structures are often cut across by later ruined walls and the standing structures that made them redundant. Often, however, features will be relatively isolated and difficult to relate to others of different periods.

#### Communal value

Now places of pleasure as much as work, and so highly valued. Much topographical writing, poetry and art is set in Cornwall's intertidal zone, the liminal place between land and sea, the overworld and underworld.

#### Aesthetic value

A wide variety of well-preserved components from the medieval period onwards; contributes much to the historic character of the county.

## Potential for amenity and education

Many interest groups already make use of this Type: walkers, sailors, canoeists etc. There has, however, been relatively little presentation of the coherent and well-preserved historical remains to the public.

Harbours are appreciated by visitors to seaside towns and by locals who, as noted under Communal value, can vividly imagine scenes from the recent past. Many quays are still used. The potential for using visits to harbours to illustrate local history courses in schools and in further education is great. There is much potential to inspire historians and writers.

#### Survival

Generally fairly good even though most components are no longer used. Quays were substantial structures and often survive well. Many of the ancillary features in the sea and river side settlements have either been retained in converted forms or are respected by the new, relatively conservative communities who occupy these places. Most features are both attacked by and protected by the sea. Layers of sand, shingle and mud cover and guard features. Some organic remains and deposits can be preserved very well if permanently waterlogged (e.g. timber boats).

## **Vulnerability of components**

A relatively stable Type, the landform being its best protector with little threat of agricultural expansion or road-building. Much is covered by either national or county designations (SACs, SSSIs, AONB, AGLV etc) and some control must be exerted by the conservatism of many residents. There are also some National Trust holdings in this HLC Type.

#### Forces for change

Development of settlements is likely to continue in these desirable locations. The gradual increase in recreational boating affects this HLC Type. There will continue to be gradual erosion by the sea. Dredging of silts in estuaries can also be very damaging as can treasure-hunting.

#### Safeguarding the Type

Continued palaeo-environmental research on the muds should inform our understanding of their recent as well as medieval and earlier development.

Consider controlling proliferation of watersports. Closely monitor further expansion of sea and river side settlements. Identify and secure key features such as quays and lime-kilns.

The potential existence of buried features along foreshores should be considered when dealing with proposed developments. The good maintenance of extant features should be encouraged and if they are protected statutory constraints should be enforced. More research into this HLC Type is required and good management will be made easier through the production and implementation of integrated management plans. Both natural and historical interests should be fully considered. As well as protecting vulnerable but important remains, these plans should aim to improve the interpretation of this HLC Type and thus increase public enjoyment of it.

## **Anciently Enclosed Land**

# **Defining attributes**

The agricultural heartland, with farming settlements documented before the 17th century AD (source, Institute of Cornish Studies place-names index) and whose field patterns are morphologically distinct from the generally straight-sided fields of later enclosure. Either medieval or prehistoric origins. Tends to be on relatively sheltered land, not too steep and not too poorly drained, but can extend onto the edges of high downs. Networks of winding lanes and roads, often deeply cut by the passage of people, animals and vehicles over centuries or thousands of years. These connect farming settlements whose layouts are typically irregular, often clearly shrunken from hamlets; some are still hamlets. Churchtowns and a few larger villages are scattered through the Type which also contains, or surrounds, most of the county's ancient towns.

There are now few people on foot; most are in vehicles: tractors, four-wheel-drive vehicles or cars. It is often strangely silent except for the barking of dogs and the drone of tractors crossing and re-crossing fields.

The Type can be broken down, on the basis of morphology again, supplemented by interpretation based on substantial landscape history research undertaken in the last half century, into the following significant subtypes (see Herring 1998) and these have been plotted in the Lynher Valley HLC (Herring and Tapper 2002) and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Val Baker 2003).

- Medieval strip fields (unenclosed)
- Derived from medieval strip fields (enclosed)
- Derived from medieval cropping units
- Barton farm field patterns
- Irregular field patterns
- Irregular peripheral fields

#### Principal historical processes

Much, even most, of this Type will have been enclosed and farmed since later prehistory (Middle Bronze Age onwards, from c1500~BC). Most of the land cleared and improved in later prehistory was re-organised in the medieval period into extensive 'strip' field systems. These were 'open' in that a low bank, at most, and not a stock-proof hedge defined each strip-shaped holding. When the field or cropping unit containing several strips was being grazed in common by animals belonging to all the households in the hamlet, the banks were stepped over by cattle, sheep and other livestock. The field or cropping unit containing the strips was of course enclosed by a stock-proof boundary. Many strip field systems are still recognisable in the Cornish landscape, either as bundles of enclosed or unenclosed strips, or as the cropping units that contained the strips. These strip field systems were associated with hamlets of from a couple to around a dozen co-operating households, but usually less than six households (Herring 2006).

A superb example of unenclosed strips, or 'stitches' as they were often referred to in Cornwall, are the Forrabury Stitches, located on an undulating plateau above Forrabury and Boscastle, and one of only five remaining areas of actively farmed open strip cultivation in Britain.

The gradual enclosure of 'open' strip fields, mainly from the 14th to the 17th century in Cornwall, much earlier than in most parts of England, transformed this Type into that which survives today, fields of various sizes and shapes, but almost all with sinuous sides, usually parallel with each other, whose boundaries are substantial, stock-proof hedges and walls, supporting rich and varied fauna and flora. At the same time, the communal society of the cooperative hamlets gave way to a more individualistic one of self-contained farming families, a society that survives today. Many people were edged out and left the land, becoming craftsmen and women, entering towns, and working in the local extractive and manufacturing industries (principally tin and later copper mining) whose stimulus to commercialism had

probably accelerated the change in rural society. The communalism of the hamlets and strips seems to have been undermined as individual households exploited the opportunities offered by the growing populations and markets associated with Cornwall's early industry. Eventually most individuals broke free from the constraints of communalism, enclosing their own land (Herring 2006).

In the 19th and 20th centuries, increased mechanisation of agriculture has led to the further reduction in hamlets, the pre-eminence of the solitary farmer, the amalgamation of adjoining farms, the removal of many field boundaries, and the re-organisation, abandonment, or reuse as purely residential accommodation of many farmsteads.

Fewer, more irregular, medieval field systems appear to have been laid out by more solitary farmers. Some of these may have reused later prehistoric fields (as in West Penwith and in parts of the Lizard). Here we can see modern farmers still using field systems whose basic shapes are over two thousand years old.

Irregular peripheral fields are primarily located along valley, stream and parish boundary edges. These were usually used for non-arable aspects of Cornwall's mixed farming, often as hay meadows.

A fourth form of anciently enclosed land has been identified since the 1994 HLC: the Barton farm field system, which usually shows little or no evidence of having been directly derived from strip field systems. These systems have roughly rectilinear fields, usually significantly larger than the other subtypes. Some can be shown to have been established in former deer parks (as at Godolphin, Hornacott, and Trelawne) and all were the farmlands worked for or by the lord of the estate or manor.

Land use within the field systems was part of an integrated mixed farming regime based in Cornwall, as in neighbouring Devon, on ley or convertible husbandry in which any field (or cropping unit in the strip field systems) would be under grass for around 6 to 10 years before being de-turfed (usually manually), the turves dried, and burnt and the ashes scattered, mixed with other dressings (yard and barn dung, sea sand, seaweed, ditch cleanings, etc), the year before a 2-4 year cropping round would commence. It was this husbandry regime that meant that Cornish field systems typically had between 9 and 12 fields, and often exactly 10, including the cropping units in the strip field systems.

There has been a re-colonisation in the second half of the 20th century of this Type by commuters and retired people, the mobility offered by the motor car making this feasible. Many redundant farm buildings have been converted into dwellings to accommodate this.

## Typical historical/archaeological components

Dominated by fields, now a mixture of arable (often uniform, sprayed and weed-free, worked by machine not hand), permanent pasture, improved grassland (again usually uniform, single-species and less than semi-natural), some small fields of traditional meadow, usually on less modern farms, and small patches of lowland bog, woodland and scrub, again mainly on the less modern farms.

The fields are distinguished by their patterns and their dividing walls and hedges. Patterns are all irregular in appearance with very few straight lines. Even those with parallel boundaries (mainly enclosed medieval strip fields) do not usually appear regular when viewed from ground level, the undulating land twisting and distorting lines.

The two main field pattern types in AEL are more or less directly derived from medieval strips. Enclosed strips developed where the greater numbers of households in the larger hamlets had difficulty coming to agreements to re-organise complex landholding arrangements. Farmers tended then to enclose individual strips, or bundles of just two or three, and the result is a pattern of enclosed strip fields closely similar to that of the original open field. There are good examples throughout Cornwall, from Gooseham in the far north, Harrowbarrow in the far east, Predannack in the far south and Escalls in the far west.

More often the small Cornish hamlets radically re-organised their field systems into ones with larger, block-shaped fields. Even here, though, it is usually possible to identify the medieval cropping units or furlongs. These tend to be roughly square with slightly sinuous but nevertheless fairly parallel sides (making it easy to picture a group of narrow strips filling them

up). Medieval cropping units constitute the highest proportion of the Anciently Enclosed Land, consequently contributing a great deal to its historic landscape character.

Barton field systems have larger rectangular fields up to 20 acres (8 hectares) in extent that do not appear to have derived from strip field systems. It may be imagined that in the later medieval or early post-medieval periods the stewards of local yeomen, who had established control of previously communal field systems, or abandoned deer parks redesigned the fields to better suit the needs of large non-communal landholders.

Rather rarer are medieval field systems which appear to have never been arranged in strips but were instead irregular shaped closes, perhaps directly inherited from prehistoric farmers, often accreted onto core fields, as woods or heath were gradually cleared and enclosed. They have much in common with the so-called assart fields found in many parts of Britain, often where woodland was enclosed.

Irregular Peripheral Fields are found mainly in valley bottom and tend to be associated with all of the above Types.

Field boundaries vary. As noted above, most would have had medieval origins but their present forms are the products of several hundreds of years of refurbishment and repair. In many cases there seem to have been episodes of stripping down and rebuilding. Most field boundaries are essentially earthen banks with quarry ditches along both sides but some have stone-facing, particularly at vulnerable points like gateways. Because most Anciently Enclosed Land is away from the granite, on the killas and culm lands, stonework is generally of small slate stones arranged in courses, usually either vertically set or in herringbone (Jack and Jill) fashion, but sometimes laid horizontally. Some boundaries have been provided with a projecting cope (to keep sheep in, or out).

All field boundaries were built to be stock-proof and most are covered with vegetation, including trees. The boundaries on the higher or more exposed ground tend to lack trees but do have brambles, thorn and furze bushes. In lowlands hedgerow trees include large numbers of mature oak and ash. Sycamore trees are generally younger and most have probably colonised hedges rather than been deliberately planted. Hedges in some parts of Cornwall, like the Roseland, were once dominated by elm and these consequently now have much barer landscape than they would have been until the 1970s.

Being the land of ancient enclosure, this is also the principal area of ancient settlement. This mainly takes the form of single farms now, although from later prehistory through to the medieval, and often right into the modern period, the Type would have been dominated by small farming hamlets.

Many enclosed or defended later prehistoric hamlets, or 'rounds', survive either as earthworks or as underground remains producing cropmarks on aerial photos. There may have been as many unenclosed or 'open' prehistoric and Romano-British settlements as there were rounds, but open settlements, with houses more loosely scattered through fields tend to be less easy to detect archaeologically.

Most medieval hamlets were located in sheltered folds in the rounded topography, usually closer to the tops of hills than the bottoms, and many seem to be surprisingly exposed. Many hamlets survive, but few now contain more than one farming family and large numbers have none, being instead quiet residential hamlets, often with the 18th or 19th century farm buildings converted into dwellings. The fabric of the working and residential hamlets is often similar but their character (established by movement and smell as much as by shapes of buildings and spaces) is usually radically different.

Buildings are a mix of the local vernacular (farmhouses and farm buildings, stone and cob, with mainly slate roofs and little thatch) and modern standardised (parents' bungalows, covered yards, silos). Most farms have their buildings, gardens, mowhays (yards for stacking corn, hay, turf, furze and bracken), orchards and trees irregularly arranged around open townplaces or yards which have lanes leading off to fields, pastures, mill and the world beyond.

This is also the land of medieval churches, churchtowns, and the few small villages where, from medieval times, smiths, carpenters, wheelwrights, cobblers, innkeepers and shopkeepers set up their businesses, serving the farming community. Connecting farms and

linking them to mills, sanding beaches and churchtowns and to the medieval market towns are the lanes, often of prehistoric origin, and the longer routeways. Away from the open tracks crossing the downs, all are hedged and many are cut down deep into the subsoil or even bedrock. They wander apparently randomly but originally purposefully through the countryside, crossing streams and rivers by ancient fords (most now replaced by post-medieval bridges). Some are now tarmacked but many are farmers' tracks or overgrown green lanes.

Two or three thousand years of agriculture, including some drastic revisions of the layout of fields, has taken its toll of earlier historical features and the main early survivors visible at the surface are the relatively robust Bronze Age barrows and Iron Age/Romano-British rounds (farming hamlets defended by ramparts); even these are usually ploughed down, their earthworks spread. Much important archaeological material will survive below the surface, including the Bronze Age, Iron Age and Romano-British settlements and fields of the farmers who originally cleared this land.

#### **Principal locations**

Found in all parts of Cornwall, though more broken up by other Types on the higher or more marginal ground (for example largely in sheltered valleys on Bodmin Moor).

# Variability

The six subtypes are found throughout Cornwall, though there are more barton fields in the east and more irregular fields in the west. There are also clusters of the larger former hamlets and their associated more clearly defined former strip field systems, as in the far north-east, the middle Tamar valley and between Padstow and Newquay, but such strip fields are found in all parts of lowland Cornwall.

Greater variety is found in components and especially those that reflect materials to hand: boundary forms and vernacular architecture. There are distinct areas where cob rather than stone predominates for building wall and where rag slate or thatch is more common than scantle slate. Closer analysis will confirm that there are areas where the balance between arable and pasture within the mixed farming regime varies.

#### Past interaction with other Types

In prehistoric, medieval and early post-medieval periods, this Type, being the home of the farming community, was the hub of relations between the various parts of the Cornish countryside and there were also significant relations with all other contemporary Types. Some connections were very directly related to agriculture, so the Upland and Coastal Rough Ground was used by farmers for their summer grazing and as a source of fuel and building stone and the Intertidal Type was a means of transporting goods to markets. Towns were located at 8-12 mile intervals through this Type as agricultural markets on long-distance routes. Churchtowns and other rural villages supplied more local needs.

Some farms developed into country houses and farmland was often then made Ornamental. Most other more recent Types have also been superimposed on areas of Anciently Enclosed Land.

## **Evidential value**

Considerable potential for further research. Each farming settlement will contain a wealth of historical, architectural and archaeological information. Surveys of field systems yield considerable agricultural, social and tenurial information. Buried archaeological features from prehistoric, medieval and post-medieval periods and including settlements, fields, ceremonial and ritual monuments and industrial remains can be expected virtually anywhere in this Type. A project will begin in 2009 to more formally assess the extent that prehistoric and Roman period material can be predicted to exist within Anciently Enclosed Land in Cornwall.

#### Historical value

Modern buildings stand alongside 19th, 18th or 17th century or even earlier ones, whose positions follow medieval layouts in settlements linked by medieval or prehistoric lanes and tracks running through fields where 19th and 20th century alterations to later medieval or early post-medieval enclosures of medieval strip fields (themselves on the site of prehistoric

farmland) are detectable. The Type swarms with intersections and lines to the distant and recent past. Most people appreciate this, even without understanding the historic details.

#### Communal value

Perhaps rather taken for granted until damage or destruction makes people aware of its importance in their lives. Its value as a rural cultural heartland, reassuring and strengthening those who pass through it, is then appreciated. It is doubtful whether many people appreciate its long and complex evolution but most will know that this countryside is fundamentally old; the churches and the lanes probably signal this more than the farms and fields.

#### **Aesthetic value**

Covers around 50% of Cornwall's area and makes a significant contribution to landscape character. Generally small-scale fields with curving lines (lanes, field boundaries, etc). Often numerous hedgerow trees creating an open wooded feel landscape to the landscape, not unlike the bocage of parts of France.

## Potential for amenity and education

This is usually working land, mainly appreciated from the road or footpath. Footpaths should be kept open and with the willingness of farmers and landowners, more could be created, especially where their route takes in places of particular interest. The educational potential is also great with a full and interesting story to be presented, both indoors and in the fields and farmsteads.

#### Survival

Although a robust Type, there has been considerable alteration to field patterns in the 20th century by hedge removal and to farmsteads by redundant buildings being either removed or converted for reuse. Despite the loss of many hedges and the transformation of many hamlets and churchtowns, the Type retains its coherence in most parts.

The relationships between farms and fields via lanes and roads is usually clear.

#### Vulnerability

Some areas are protected through various designations including Conservation Areas, Listed Buildings and Scheduled Monuments. Some farms are subject to Environmental Stewardship Scheme agreements or are National Trust holdings. Most, however, are beyond designated or protected areas and are vulnerable to hedge-removal and building demolition/conversion. The Hedgerow Regulations, introduced in 1997, may have helped reduce the loss of field boundaries; people have to apply to the Council for permission to remove hedgerows and can only remove those that are not deemed 'important' on ecological or historical grounds. There is, however, a continuing problem with the limited definition of hedgerows being based on midland English growing hedgerows, rather than Cornwall's built boundaries.

## Forces for change

Agricultural improvement continues in a piecemeal way, being dependent on the attitude, energy, sensitivity, wealth etc of individual farmers, and the pressures of national and international markets. A growing appreciation of the value of the Type and Government and EC subsidies and schemes aimed at promoting more landscape-sensitive and sustainable agriculture can be expected to have a positive, restraining effect on damaging change.

Road schemes, the spread of housing from towns and certain larger villages, and other developments can all be expected to continue to nibble away at this Type. The growth of the retired, commuting and second/holiday home sectors of Cornwall's rural population, coupled with the continuing amalgamation of holdings (and thus the redundancy of farmsteads) will continue to alter the shape and reduce the historical integrity of farming settlements. Many churchtowns and some other former hamlets have suffered from a perception by planners, who may be unaware of the long history of Cornwall's settlement pattern, that rural settlement should be in the form of villages. Many identified as key settlements have swollen from a handful of dwellings to scores or even hundreds of houses within the last two or three decades. The result is a dilution of the essentially dispersed nature of settlement within Cornwall's Anciently Enclosed Land.

# Safeguarding the Type.

Environmental Stewardship schemes could be carefully designed to encourage more extensive long leys, and fuller use of all 'arable' parcels of a farmer's land. Spring-sown crops reduce length of time ground is bare and susceptible to soil erosion. Contour ploughing (rather than cross-contour) ploughing should also be encouraged as this too reduces soil loss (by not having furrows acting as drains).

Consider incentives to farmers to reinstate the areas of marsh, copse, brake etc that would have been important elements in the more varied Anciently Enclosed Land of the pre-WW2 countryside. Many of these also provide the additional benefit of acting as brakes on the flow of water (and nutrients or pollutants) into the rivers and streams.

Every opportunity should be taken to encourage land managers to retain hedges/walls. A review of the state of the historic farm building stock needs to be made to assess the rate and impact of conversions and demolitions on the stock of intact pre-20th century farmsteads. Alternative uses of particularly significant redundant farm buildings should be fully considered before permissions are granted to convert into dwellings. Planners should take care to make decisions that maintain the overall character of the Anciently Enclosed Land: smaller scale development in hamlets, would be more appropriate than the creation of villages of several hundred inhabitants. The great historic value of AEL needs to be fully borne in mind when applications for developments that will destroy or damage parts of it are being considered. The predictability of encountering prehistoric, medieval and earlier post-medieval remains should be borne in mind when designing responses to applications to disturb Anciently Enclosed Land.

#### Post-medieval Enclosed Land

# **Defining attributes**

Land enclosed in the 17th, 18th and 19th centuries, usually from land that was previously Upland Rough Ground and often medieval commons. Generally in relatively high, exposed or poorly-drained parts of the county.

In Cornwall there are five principal types of field pattern which could form the basis of subdivision of Post-medieval Enclosed Land into sub-types (see Herring 1998). These were mapped in the Lynher Valley HLC (Herring and Tapper 2002), the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Val Baker 2003), and in a detailed characterisation of the west Cornish rough ground (Dudley forthcoming).

- Wholly new farms (usually around 30 acres, 12 hectares) with large regular straightsided fields
- Wholly new smallholdings, usually less than 5 acres (2 hectares), usually with small regular straight-sided fields
- Extensions to Medieval field systems, usually with no new settlement established
- Alterations to Medieval field systems, typically through the insertion of numerous new field boundaries
- Complexes of horticultural gardens, usually tiny enclosures

Fields in Post-Medieval Enclosed Land normally have perfectly straight sides and boundaries have less mature or varied vegetation cover than in Anciently Enclosed Land. Many are drystone walls. Being exposed, there is relatively little woodland compared with Anciently Enclosed Land, but more evidence of its previous vegetation in gorse, heather, bracken etc on hedges and in corners of fields. Land is now usually pasture, with little arable, this being essentially marginal land.

## Principal historical processes

Although some of this Type was enclosed in the 17th and first half of the 18th century, the great part was taken in from rough ground in the later 18th and 19th centuries.

It has been widely thought that the stimulus for this expansion came from industrial workers establishing small farms in their spare time, but this process has been over-emphasised and over-simplified. Even in the industrial heartlands a separate, purely agricultural expansion, was often the main source of this Type and the main role of industry was to provide a growing market for the products of an expanding agricultural base. Away from Cornwall's main industrialised areas, the Post-medieval Enclosed Land can be seen as mainly the product of new technologies or methods enabling farmers to extend their margins. It should be borne in mind that similar new fields were being created throughout Britain, usually at long distances from the nearest industries.

The new enclosures were not established in unused ground, but in land that had previously had an agricultural value usually as summer grazing and fuel grounds but also as marsh, willow gardens, wet meadows etc. There would therefore have been loss as well as gain, and the losers were generally those who had previously enjoyed common rights to these resources. Those who gained included not just the families who obtained a living from the newly improved land, but also the lords who received a much higher rent than previously. Changing religious ideologies also stimulated or encouraged the thrifty hard work which improvement of marginal land entailed; it is no coincidence that the period of intakes was also that of the rapid rise of the various nonconformist churches in Cornwall. There were, therefore, more complex forces at work than is often appreciated.

## Typical historical and archaeological components

Enclosures are almost all rectilinear with dead straight sides. (As they are also on uneven ground, this most characteristic aspect of the field systems is not always apparent at ground level as illusions of sinuosity are created as hedges ride over irregularities.)

Complexes of market gardens, are located in specific parts of Cornwall (e.g. on south-facing cliffs or in sheltered valleys such as the Tamar and Fowey).

There are more drystone walls in this Type than in Anciently Enclosed Land, partly because of the quantity of stone to hand when clearing previously rough ground, but also because this was a particular style of boundary building prevalent throughout Cornwall in the 19th century. There are also, however, turf banks on Bodmin Moor (turfs cut like bricks to form faces to the boundaries) and the usual Cornish hedges (stone-faced earth walls).

Buildings in farmsteads and smallholdings tend to be standardised rather than vernacular in their design and relatively small and poorly constructed compared with those in Anciently Enclosed Land. There is much use of corrugated iron and asbestos for roofs, and concrete block for walls. Most settlement is dispersed, but there are examples of small nucleations, especially where associated with extractive industry.

# **Principal locations**

A particularly large block of post-medieval fields is found in the formerly unenclosed land north and west of Truro, and there are many other significant areas, as in the centre of Bodmin Moor around Bolventor, on Hingston Down, in Week St Mary, on the edges of the Lizard Downs, on Newlyn Downs and on the edges of the West Penwith hills. Smaller patches are found on the edges of medieval fields. Horticultural fields are most common on the south coasts, and in sheltered valleys, especially the Tamar Valley.

## Variability

See above for the various sub-types. As for Anciently Enclosed Land, there is variety in boundary and building form that is dependent on materials to hand.

#### Past interaction with other Types

Often contiguous with Anciently Enclosed Land and having lanes and roads connecting the two. There were also usually links with Upland and Coastal Rough Ground as common rights of pasture and turbary were usually attached to leases of land. Those smallholdings created and worked by industrial workers are usually found close to the mines, quarries and pits that were their holders' principal workplaces.

#### **Evidential value**

Good potential for further research. The causes and methods of enclosure will repay historical research and archive documentation is often rich.

#### Historical value

Up to 300 years of agriculture, including, in the last 50 years, a shift from mixed to largely pastoral farming, has left evidence for several post-medieval episodes. As noted above, the whole Type is itself evidence for a radically different phase, lasting over two thousand years, of summer grazing or fuel collection, and then, within the Type, there is sometimes evidence for still earlier episodes in the form of prehistoric monuments, both secular and ceremonial: several stone circles and standing stones survive in Post-Medieval Enclosed Land and numerous cairns and barrows.

#### Communal value

Not usually valued by people living outside the Type, being very fragmented, often inaccessible country with relatively few picturesque features compared with Anciently Enclosed Land and many attributes with more limited appeal. May suffer unduly when set beside the more traditionally appreciated beauty of much of the surrounding countryside.

#### **Aesthetic value**

Its internal coherence and contribution to landscape character are noteworthy.

## Potential for amenity and education

The surviving prehistoric features will probably attract more interest than the fields and settlements of enclosure. Like Anciently Enclosed Land, this is usually working land, mainly appreciated from the road or footpath. Footpaths, of which there are often very large numbers in Post-medieval Enclosed Land, should be kept open and with the willingness of farmers and landowners, more could be created. The educational potential is great with a full and interesting story to be presented, both indoors and in the fields and farmsteads.

#### Survival

Good. There has been relatively little modern agricultural improvement compared with Anciently Enclosed Land, owing to the land's marginality.

#### Vulnerability

Not usually protected in its own right, although some blocks do fall within the AONBs, and some within the Cornwall and West Devon Mining Landscape World Heritage Site (Gamble 2004).

## Forces for change

Agricultural improvement, notably the removal of hedges and walls, can be expected to continue (though see Anciently Enclosed Land for a discussion of the effect of the 1997 Hedgerow Regulations). Road schemes and other developments can be expected in this relatively under-valued Type.

Some small nucleations within this Type have been identified as key settlements and have consequently swollen from a handful of dwellings to scores or even hundreds of houses within the last two or three decades. The result is a dilution of the essentially dispersed nature of settlement within this Type.

## Safeguarding the Type

Traditional husbandry practices in Post-Medieval Enclosed Land would have been similar to those in Anciently Enclosed Land and the comments made under Anciently Enclosed Land therefore apply equally here.

Every opportunity should be taken to encourage land managers to retain hedges and walls. The targeting of particularly marginal examples of Post-Medieval Enclosed Land for rough ground re-creation schemes should be considered. Efforts should be made to raise the profile of this Type, by opening more footpaths, and by increasing awareness of the historical background to the Type.

Planners should take care to make decisions that maintain the overall character of Post-Medieval Enclosed Land: small-scale dwellings and clusters in the open countryside may be more appropriate than the creation of villages of several hundred inhabitants.

## **Modern Enclosed Land**

#### **Defining attributes**

Mainly Anciently Enclosed Land or Post-Medieval Enclosed Land whose field systems have been substantially altered by large-scale hedge removal in the 20th century (main source of information being comparison of 2nd edition OS maps of *c*1906 and later aerial photos). It also includes, however, 20th century intakes from rough ground, woodland and marsh. The larger fields that result from hedge removal are often farmed more intensively, using heavier machinery, than in 'unimproved' Anciently and Post-Medieval Enclosed Land.

In Cornwall generally, there are two principal subtypes of modern enclosure (see Herring 1998) that were mapped separately in the Lynher Valley HLC and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Herring and Tapper 2002; Val Baker 2003) and should be in any future reworking of the Cornwall HLC.

- Intakes beyond the edges of Anciently or Post-Medieval Enclosed Land, including some whole new farms (notably on the St Breock Downs).
- Alterations to field systems in Anciently or Post-Medieval Enclosed Land.

# **Principal historical processes**

The later 20th century alterations are mainly the product of a combination of increased agricultural specialisation coupled with capital investment in the form of machinery relatively insensitive to the intricacies of smaller fields. An underlying cause of the change is the inability of many small farmers to compete with neighbours who need to expand to maintain adequate returns on their investment. The result is amalgamation of farms and improvement. Farms at this semi-industrial level would normally include arable crops, either as cash-crops or as providers of winter fodder for expanded herds.

In some upland parts of Cornwall, such as on the St Breock Downs, the processes of enclosure (usually by fence rather than hedge) and improvement were late, not commencing until immediately after the Second World War.

#### Typical historical and archaeological components

Fields are often very large, but when derived from Anciently Enclosed Land they usually have sinuous sides as selected ancient hedges are retained. Permanent and temporary fencing is also common, especially in that taken in from Rough Ground, Woods, etc.

Settlements and most of the other historic components of that Modern Enclosed Land established within earlier field systems usually retain many features of Anciently Enclosed Land, although farmsteads are often also altered, with numerous large covered yards, silage pits etc and often few surviving stone farm buildings. Occasionally whole farmsteads have been removed.

The use of heavier agricultural machinery means that there are usually even fewer prehistoric features visible at surface than in Anciently Enclosed Land and also that sub-surface remains are more likely to be damaged or destroyed.

# **Principal locations**

The 1994 HLC identified more of the reorganisation of Anciently Enclosed Land in the eastern third of Cornwall. St Breock Downs has the largest patch of newly established Modern Enclosed Land.

#### Variability

See above for the two sub-types.

# Past interaction with other Types

See Anciently and Post-Medieval Enclosed Land for general comments. The rough ground reused as Modern Enclosed Land would have been used as rough grazing and as fuel grounds by farmers in surrounding enclosed land (Anciently and Post-Medieval Enclosed Land)

## **Evidential value**

Little research has been done on the impact of this Type on the historic landscape although research on the background Anciently and Post-Medieval Enclosed Land is increasing. Potential is more limited than in Anciently and Post-Medieval Enclosed Land due to the destruction of field patterns and the loss of sub-surface remains. Potential for documentary research, using maps etc, is still good.

#### Historical value

Away from the fields, the comments for Anciently and Post-Medieval Enclosed Land apply, but the damage to fields that were first established in the prehistoric or medieval periods seriously reduces the evidence. The survival of a small number of sinuous boundaries, now defining the very large enclosures used by modern farmers, does leave a little evidence for those who can appreciate that these are relatively early features.

#### Communal value

The large fields, usually with uniformly coloured crop or grass, are striking features of the present landscape. Modern farmers will appreciate the necessity for this form of landscape if the production levels required to feed a heavily populated country and to achieve adequate returns for capital are to be achieved. Many other people, however, lament the loss of the recognisably and reassuringly ancient or historic field patterns that they may have either grown up with or that they associate with Cornwall. As well as this loss, the replacement of a previously fragmented and intricate landscape containing local shelter and uneven splashes of colour with a monotonous one is widely considered unfortunate.

#### **Aesthetic value**

Large fields and boundary fences stand out as alien in the otherwise intricate Cornish farming landscape.

#### Potential for amenity and education

Less than for Anciently and Post-Medieval Enclosed Land, not only because its historic quality has been greatly reduced, but also because there is generally less desire to walk through and explore this country.

# Survival

The Type is becoming more common as it is the product of an ongoing, nationwide process. Use of heavy machinery greatly diminishes the quality of survival of archaeological components above and below surface within the fields. Beyond the fields, the components of Anciently and Post-Medieval Enclosed Land are not usually so badly affected. It is in the degree of surviving coherence of the historic landscape components that hedge-removal has caused most visible loss, by divorcing the farmstead from its historic farmed landscape through the removal of the networks of hedges and internal lanes.

# Vulnerability

The modern features generally receive no protection though small patches do fall within AONBs. The 1997 Hedgerow Regulations now protect many field boundaries.

# Forces for change

The modern features are themselves not subject to forces for change beyond the appeal of conservationists to return certain aspects to more traditional forms. The Type is itself a force for change in Anciently and Post-Medieval Enclosed Land and on the unenclosed land that it is taken in from.

# Safeguarding the Type

Incentives for conserving older and more varied forms of Enclosed Land could be coupled with legislation such as the Hedgerow Regulations to discourage the creation of this Type.

See Anciently Enclosed Land for traditional husbandry methods.

#### Settlement

#### **Defining attributes**

Settled areas from larger farming settlements upwards.

Settlements in Cornwall can be divided into three sub-types (see Herring 1998) although this subdivision has as yet only been applied to the Lynher Valley HLC and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Herring and Tapper 2002; Val Baker 2003). For the 1994 Cornwall HLC the historic cores of towns (those shown on the c1905 OS map) were distinguished.

- Farmsteads. Following initiatives elsewhere in Britain, this subtype could itself be usefully subdivided (e.g. courtyard, linear, irregular groups).
- Hamlets/villages. Again, these could be subdivided churchtowns, medieval farming hamlets, industrial and highway villages, etc.
- Towns. Can be further subdivided by form of town (medieval market towns, resort towns, industrial towns, port and harbour towns, etc.) and by functional zones within them (residential, commercial, infrastructure etc).

## **Principal historical processes**

This is a complex Type with numerous historical trajectories contributing to its present form.

Most medieval towns in Cornwall were fairly evenly spaced (10-15 miles apart) and provided markets for agricultural hinterlands and housed a range of craft and financial services. Medieval towns were small, typically with just three or four main streets, usually with one of these either widened or splayed to form a long triangular market place. Most have a larger than average medieval church, often placed at one end of the market place, and some have surviving medieval castles (most famously Launceston), or the known sites of them (Truro, Liskeard, Tregony, Week St Mary).

In the post-medieval period, the old towns grew slowly until the 18th and 19th centuries when increased mining, quarrying and other industrial activity led many to expand more rapidly and the growing commercial activity in the rest of the county caused some others to follow. A number of towns, however, retained their medieval size and layout until the 20th century (places like Week St Mary, Kilkhampton, Tregony, Camelford, Stratton and St Germans). Several new towns developed in the post-medieval and modern periods to serve industry, ports and seaside recreation (Hayle, Falmouth, Newquay, Porthlevan, Perranporth, Torpoint, Bude, etc), sometimes through growth from medieval churchtowns (like Camborne and St Just).

Many rural settlements will have their origins in the Early Medieval period (i.e. post-Roman and pre-Norman), or even earlier, often as small hamlets (typically 3-8 households), but most extant buildings (except churches) are post-medieval or modern. Lanes and open spaces within settlements may, however, be medieval and we should expect there to be important below-ground archaeological remains.

Virtually all rural or farming settlements large enough to be included in the county-wide mapping of this Type have later 20th century housing at their edges. Those that have not been plotted are generally those that remain at their smaller medieval scale. These have usually been included within the Anciently Enclosed Land HLC Type.

In the mining, quarrying and china-clay areas of Cornwall there are dozens of settlements whose main function was to house industrial workers' families. Some of these developed from pre-existing farming settlements, but many were entirely new creations. A particular feature of eastern Cornwall is the number of small mainly post-medieval villages that developed along

highways or at river crossings, places that served travellers and acted as local service centres (having smithies, carpenters' shops etc).

In the 20th century, some churchtowns and villages, identified in Local Plans as key settlements, have been expanded by the provision of housing estates for local families and new residences for a growing population of retired people and people wanting second or holiday homes in Cornwall. Many settlements are largely residential now, most of their original industrial, harbour and commercial functions having died, their original cores now dwarfed by 20th century expansion. Others are now dominated by the provision of facilities for tourists.

## Typical historical and archaeological components

Their long and complex histories have produced, in Cornish towns and villages, places with a wealth of historical and archaeological features. Clearly some settlements will be simpler than others, notably the post-medieval industrial villages but all will have a variety of building types, ages and styles, different sectors for residence, commerce, industry, storage, recreation, burial and ceremonial. Some will also have military remains (from late medieval castles to 20th century pillboxes). Most settlements will have rich subsurface remains with deep stratigraphies containing the footings of buildings and features of medieval or even earlier date.

## **Principal locations**

Rural towns are spaced about 12 miles apart and the only large gaps are on Bodmin Moor and in the Lizard peninsula. Industrial settlements naturally cluster around those areas where minerals, granite, slate and china clay are found, while ports and recreational towns are also, of course, found on the coast.

## Variability

See historical summary for the variety of types. Building materials and main periods of construction contribute to the way that each Cornish town is recognisably of Cornwall, but each is nevertheless unique to itself in terms of character.

#### Past interaction with other Types

Cornish towns depended on their hinterlands. Most medieval towns were primarily market-places for agricultural communities and also homes and workplaces for people involved in commerce and crafts. Even today, when most towns have become simple commercial centres, there is still a close relationship with their hinterlands, in terms of market and residence – many workers in the towns live in villages and converted agricultural buildings in the countryside.

Rural settlements or villages are usually expanded agricultural hamlets whose relationships with Anciently Enclosed Land are profound.

#### **Evidential value**

In rural settlements, extant buildings and the layout of surviving features will repay close study and, in addition, there will inevitably be a wealth of sub-surface settlement remains, some dating back into later prehistory. The study of various kinds of documents and maps will also shed considerable light on rural settlements.

Towns represent one of the most neglected areas of Cornish history and archaeology and yet have perhaps the greatest potential to add to an understanding of the county's development. Compared to some other counties, there has been little traditional archaeological work (excavation and detailed survey) within Cornish towns and architectural history has been largely confined to Listed Buildings surveys and Conservation Area Appraisals. Many towns and industrial settlements have recently been subjected to historical topographical analysis and characterisation as part of two major initiatives: the Cornwall and Scilly Urban Survey (CSUS) and the Cornwall Industrial Settlements Initiative (CISI) (see http://www.historiccornwall.org.uk/). Little work has been done on the relationship between Cornish towns and the countryside, industry, communications, the sea and the wider economic and social history of Britain and north-west Europe, all subjects whose study will illuminate Cornwall's history.

The potential is great.

#### Historical value

There is an abundance of material remains of the last three hundred years in most Cornish towns and the street plans, market places, and surviving medieval buildings (castles, churches etc) take people back a further four or five centuries. The steady trickle of discoveries of artefacts and features encountered during developments and roadworks reminds observant dwellers of the richness of their settlement's past.

Layouts of most rural settlements are also usually essentially medieval; enclosures now used as gardens or car-standings will often have been the mowhays and yards of medieval farmsteads. In general, more later medieval and early post-medieval dwellings and other buildings survive in the countryside than in the towns although there are a number of early houses in certain towns (those of Launceston, Truro, Fowey, Lostwithiel and Bodmin stand out).

#### Communal value

Cornish towns are towns, not cities. There is little that is cosmopolitan and much that is strictly functional. There are some good Georgian streets (Castle Street, Launceston and Lemon Street, Truro are especially significant), but in most towns the main period of ostentation in architecture was the high Victorian; some town centres are now brooded over by dark but ornate granite and terracotta banks and town halls. Those who appreciate urban and medieval architecture find much of interest in Cornish towns.

Hamlets and rural settlements are highly valued by both local people and visitors. Their organic layouts are interesting and satisfying to either live in or pass through, and the numerous 17th century or older buildings add beauty and antiquity to the places.

## **Aesthetic value**

Towns and villages have a wealth and great variety of historical and archaeological components, demonstrating considerable time-depth and contributing much to the county's appearance and character. There is also enormous potential for further historical research and educational amenity use.

# Potential for amenity and education

Rural settlements have most potential as attractive and architecturally interesting features to pass through by car or on foot, cycle or horseback. So long as footpaths and bridleways are maintained and not detoured around hamlets and villages (as is occasionally happening) then these settlements will continue to provide pleasure to many.

Towns are elements of Cornwall's tourist industry, often as refuges on rainy days. Many have historical features (church, castle, bridge etc) that are displayed to visitors and some have interpretative leaflets or booklets to guide people around. There is, however, still considerable potential for discreet, unobtrusive presentation of the past in most towns. This can be aimed as much at towns' inhabitants, particularly children, as at visitors and will have the benign effect of increasing peoples' awareness of the historical value of their homes.

#### Survival

Although Cornwall's settlements have continued to change quite rapidly right into the early 21st century, as places which are hubs of human activity are bound to do, the layouts and historical fabrics of most are relatively well-preserved. With layouts little changed, there is a good likelihood that subsurface remains are also intact. Rural settlements are also often in good condition, with modern developments usually lateral expansions from an historic core rather than replacements; farm buildings, however, have been increasingly subjected to conversion, usually for residential reuse.

## **Vulnerability**

Most of Cornwall's towns contain numerous Listed Buildings and Conservation Areas, usually in the historic cores, often coinciding with the HES-defined Historic Settlements. Local Plans reinforce these planning controls and most Conservation Areas are being recorded, characterised and provided with Conservation Area Appraisals. Many settlements will also fall within the broader designations of the AONB and AGLV.

#### Forces for change

Being the places where people live and carry out much of their business, settlements have always changed more rapidly than most other elements of the landscape and will no doubt continue to do so. The accommodation of new means of transport is a key area for large scale and often damaging change, both within towns and also in their immediate surroundings.

Town centres are vulnerable to piecemeal facelifts by competitive businesses keen to attract customers, and residential districts are most at risk from certain forms of home improvement, most notably at present by the replacement of windows, doors and roofs by standardised plastic and asbestos materials.

The character of towns is being most fundamentally changed by the construction of new housing, often in the form of estates of virtually identical houses whose architecture usually does not have its roots in Cornish traditions and whose layout, often in curving cul-de-sacs, also pays little regard to typical Cornish forms.

The decline of the commercial centres of many towns, as out-of-town superstores and the concentration of quality shops in places like Truro and Plymouth take their toll, is perceived by most people as a negative force for change, removing traditional businesses and gradually removing the historical meaning from these places.

Many churchtowns and some other former hamlets have suffered from a perception by planners, who may be unaware of the long history of Cornwall's settlement pattern, that rural settlement should be in the form of villages. Many identified as key settlements have swollen from a handful of dwellings to scores or even hundreds of houses within the last two or three decades, creating rural mini-suburbs drained of historical meaning and distinctiveness. Rural settlements are most vulnerable to insensitive conversions from agricultural to purely residential accommodation although there are numbers of thoughtful conversions in which original function is still clearly legible and character is maintained.

## Safeguarding the Type

Planners should take care to make decisions that maintain the overall character of the Cornish landscape, particularly noting that this is a land of predominantly dispersed settlement with small evenly spaced historic towns. Smaller scale development in hamlets, may be more appropriate than the creation of villages of several hundred inhabitants. The use of Conservation Areas to control planning in towns and rural settlements should be retained and extended. Regulations concerning replacement windows, doors, roofs etc should be enforced. The loss of historic landscape (Anciently Enclosed Land etc) at the edge of towns and rural settlements should be carefully considered when dealing with plans for edge developments (housing/industrial estates, bypasses etc). Historic layouts and features, for example buildings relating to commercial, industrial, social, and religious concerns, are very important for maintaining links with settlements' origins and development and for enhancing local distinctiveness. They should be explicitly identified and preserved. Development in towns should respect traditional layouts of streets, open areas, burgage plots etc. Large developments, such as in-town car parks, which over-ride and obliterate historic town/village features should be discouraged and careful consideration should be given to better-designed alternative proposals and sites.

## **Ornamental**

#### **Defining attributes**

The deliberately and carefully manipulated landscape, parklands and gardens surrounding large country houses, normally of 18th and 19th century origin.

This Type has been subdivided into three sub-types on the basis of its most extensive components (Herring 1998) though it is only in the Lynher Valley HLC (Herring and Tapper 2002) that these have been plotted.

- Pleasure gardens (usually immediately around the house)
- Parkland (land that was a mix of grazed or mown lawns and scattered trees)

 Ornamental plantations (used as shelter belts, frames for views, cover for game, and as sources of timber)

## **Principal historical processes**

Some later medieval Cornish estates had deer parks, but most of these were disparked or decayed by the mid-16th century and some were then reorganised along the lines of Barton field systems (see Anciently Enclosed Land HLC Type). Only Boconnoc still has a medieval deer park. These parks would have been remarkable impositions of overtly private property on to the otherwise very open and communal medieval landscape (Herring 2003).

The majority of ornamental landscapes in Cornwall were created in the 18th, 19th and very early 20th centuries, often by people made wealthy by local copper and tin mines. Designed parklands, with carefully positioned clumps of trees, open vistas uninterrupted by hedges (sunken ha-has and wrought iron parkland fencing were used instead), and carefully produced 'natural' aspects were created at places like Port Eliot, Werrington Park, Tehidy and Trewarthenick by the late 18th century. In the 19th century, the emphasis shifted towards laying out gardens with specimen trees and shrubs, camellias, rhododendrons and more delicate exotic plants, many of which could not survive further east.

These later gardens were smaller, darker and more intricately planned, being enclosed by planted shelter belts, and included gardens like Heligan, Trengwainton, Trebah and Glendurgan.

Many gardens declined in the early 20th century as the maintenance of large teams of gardeners became increasingly difficult. A large number do survive, however, many through being either passed to the National Trust or opened to the public. A recent survey of historic parks and gardens (Pett 1998) listed no less than 224 substantial ones in the county, most of which will qualify as ornamental landscapes, although many are too small to be mapped in the present exercise. Pett also noted almost as many again that were relatively minor gardens, often in suburban locations

#### Typical historical and archaeological components

There are now very few active deer parks in Cornwall but some of the sites of former ones retain aspects of their character with large open spaces, little or no settlement and more woodland than is typical in Cornwall. Some were transformed in the eighteenth and nineteenth centuries into landscape parks. Landscape parks were usually designed with the country house as the focus; indeed, many houses were positioned and designed to obtain the most satisfying view of their ornamental landscapes. Walled gardens, fruit and flower houses, and pleasure grounds were clustered around the house's sides and rear, carriage drives and rides brought residents and visitors along picturesque routes through the landscape. Scattered standard trees and clumps (often with non-native or non-local species), lakes, ponds, ha-has, obelisks, eye-catchers, gazebos or summer houses and grottos were typical features of the parklands.

Nineteenth century sheltered and exotic gardens have networks of paths leading through plantings of trees, shrubs and exotics, many of which survive. At certain points 'features' like gazebos, arches, urns etc add to the beauty of the places. Streams trickle through many, sometimes bridged, sometimes dammed to form pools, always carefully planted with tree ferns, gunnera, candelabra primula etc.

The three subtypes set out to distinguish at the broad landscape level the principal components of most ornamental landscapes: pleasure grounds near the house; more extensive parkland running away from it and the plantations through which the wider impact of the designer can be identified. It is possible, however, that a number of plantations created to enhance views from country houses have been placed within HLC Type Plantations. On the other hand, most of those plantations which can be regarded as primarily ornamental would also have produced crops of trees which would have been intended for harvesting, giving them a partly utilitarian character.

Other distant natural or beautiful features (tors, church towers, lakes, etc.) would also have been 'borrowed' in the views gained from houses or parks. An ornamental landscape stands out in the Cornish landscape, mainly through the unusually dense grouping of large and varied deciduous and coniferous trees.

## **Principal locations**

Most parks and gardens are in lowland parts of Cornwall, many are in sheltered valleys and there are a large number along the creeks of the Fal. There are also clusters around the more important towns, particularly Penzance, Falmouth, Truro and St Austell. In general there are fewer ornamental landscapes in the north-east of Cornwall.

### Variability

There are consistent themes in Cornish ornamental landscapes but the particular use made of local topography makes each garden and park an individual.

## Past interaction with other Types

Ornamental gardens are usually impositions on other historic landscape character Types. Most are in what would otherwise be Anciently Enclosed Land and some incorporate Ancient Woodlands and views over the Intertidal. Gardeners and other workers will probably have lived in neighbouring Anciently Enclosed Land or Settlements.

#### **Evidential value**

The application of archaeological surveying, excavating and recording methods to ornamental landscapes has confirmed the potential these techniques hold for understanding the evolutions of particular gardens and parks, revealing largely lost earlier features and making clear the purpose of enigmatic ones.

Detailed analysis of garden books and diaries will help reveal the workings of historic gardens and the desires and motives behind their design.

Studies in 18th and 19th century taste and display, together with work on the sources and expenditure of wealth in Cornwall will help place these ornamental landscapes into historical contexts. Relatively little work has been done on the economic and social background to the formation of ornamental landscapes in Cornwall.

#### Historical value

Some ornamental landscapes were created along the lines of single designs and have not been altered from them very significantly, beyond limited expansion. Others, however, have elements of earlier gardens or parks incorporated into them. Some also contain features inherited from earlier landscape – strip fields at Lanhydrock, barrows at Mount Edgcumbe and Cotehele, a hillfort at Pencarrow, tinworks at Trewidden, and quarries at Port Eliot, Catchfrench and Antony.

## Communal value

Those ornamental landscapes open to the public become favourite resorts, associated with pleasant spring and summer afternoons. Most people appear to come to enjoy the beautiful flowers and trees but some will also be affected by the landscape's scale and exoticness and will ponder the obvious wealth that enabled their creation.

### **Aesthetic value**

Cornish ornamental landscapes are peculiar and nationally rare, have generally good survival, high amenity value and throw light on the higher levels of Cornish society in the early modern period. They are also exceptionally beautiful and romantic places. Many plants in Cornish gardens do not survive further to the east.

### Potential for amenity and education

The large numbers of people who visit and enjoy those parks and gardens that are regularly open to the public testify to the pleasure these places can give. All Cornish gardens are different and while some stay private, there will always be a potential for further amenity provision.

#### Survival

Most parks and gardens are largely intact although some are in better condition than others. It is of course extremely difficult to maintain gardens to their original standards without the large teams of gardeners that were formerly employed.

## Vulnerability

Many Cornish gardens receive recognition by being included on the English Heritage 'Register of Parks and Gardens of Special Historic Interest in England' and some garden structures will be protected as Listed Buildings. Some ornamental landscapes will be in AONBs and many are properties of the National Trust or are in the hands of other benign owners. There is a climate of opinion that would now make the deliberate destruction or wilful neglect of an historic park or garden increasingly unlikely.

## Forces for change

The principal forces for change are the occasional storms and gales, coupled with the maturity of trees and shrubs planted up to 200 years ago, particularly in shelter belts whose existence is vital for the survival of delicate gardens. Replanting had often been neglected in the difficult years of the early 20th century and some hard decisions are now being or will soon be faced by owners regarding the feasibility of maintaining certain gardens or parks in their present forms. The destruction caused by recent gales has precipitated change at some sites.

## Safeguarding the Type

There should be a presumption in favour of preserving all those historic gardens listed in the recent publication by Douglas Pett (1998) when considering development proposals. Renovation or change in parks and gardens should be guided by a detailed understanding of their historical development. Owners should be encouraged to open their parks and gardens to the public at least occasionally each year so that people can appreciate these beautiful places.

#### Industrial

## **Defining attributes**

Only extensive areas of industrialised land are placed in this Type. Most will be the sites of extractive industry (mining and quarrying) and only a few will still be active. Where relict industrial landscape has been overwhelmed by woodland or have become absorbed into Upland Rough Ground, they are usually included in other relevant Types. The effect of these decisions is to significantly under-represent industry as most industrial sites are fairly confined and so too small to be included. Many derelict sites have been classified in other Types.

The Type has been subdivided into three sub-types (Herring 1998) but these have only been plotted as such in the Lynher Valley HLC (Herring and Tapper 2002) The following text, however, deals only with the first two subtypes.

- Extractive, metalliferous
- Extractive, stone, clay etc
- Processing, services etc

## Principal historical processes

Cornwall has been an industrial or semi-industrial region to varying degrees since the Bronze Age. It is probable that both tin and copper were streamed and mined (respectively) from prehistory. As yet, the archaeological evidence for this has been indirect, largely because later workings have tended to be in the same areas as the earliest.

Tinning, largely via streamworks, was a major industry in Cornwall in the later medieval period. As easily worked alluvial and eluvial deposits of shode (tin ore dislocated from the parent lodes and concentrated by various geomorphological processes) were becoming exhausted, the tinners began, mainly from the 15th and 16th centuries, to turn their attention to the lodes themselves and became miners proper. They worked at first from the surface, but as rock-breaking and pumping technologies improved they began to create deep shaft mines and by the late 18th century flourishing tin and copper mines were scattered around each of Cornwall's mining districts. Engine houses were becoming commonplace.

Copper mining continued to expand until the mid-19th century and tin for a few decades more but a combination of cheaper foreign imports and the gradual exhaustion of the more easily worked lodes led to rapid declines in both industries by the end of the century. Tin mining struggled through the 20th century at a handful of mines and now (2009) no mines are operational, although there are plans to re-open South Crofty, near Pool.

Granite quarrying was largely local and confined to surface rock until the early 19th century. Then new technologies and new national and international markets for precision-dressed stone for major civil engineering and monumental architecture saw many of these quarries flourish. Other quarries were opened for roadstone/ballast.

Slate Quarrying was an important extractive industry in north Cornwall and especially in the area around Delabole from the later medieval period; some slate quarrying continues there.

China clay (kaolin), a form of decayed granite, has been worked since the mid eighteenth century, principally on the Hensbarrow granite (the China Clay Area), but also in the western half of Bodmin Moor, and on the Tregonning and West Penwith granite. It is in these outlying areas that early remains survive best. The industry continues to work on a massive scale on Hensbarrow.

There were, and are, processing plants and manufactories ancillary to the extractive industries, as well as industrial tramways, wharves etc.

## Typical historical and archaeological components

This is a complex Type, with each form of extractive industry having its own evolution and thus sequences of components and features.

Tin streaming: Cuttings from *c*1.0 to 18.0m deep, *c*10 to 80m wide, with patterns of linear or ramped dumps of stones and waste in their bottoms. Leats and dams may survive along their sides and on the slopes around. Some were reworked in the 19<sup>th</sup> century, but many appear to be entirely medieval. Waste from streamworks has silted up most of Cornwall's estuaries.

Mining: Surface-mining left great openworks, or runs of densely packed primitive shafts (as on the downs north of the Hurlers stone circles near Minions and on Kit Hill) with adjacent heaps.

Shaft mining has often left distinctive structures: engine houses for pumping, winding and stamping, dressing floors for processing the ores, count houses, magazines, dries, tramways etc. The shafts themselves are often hedged or fenced around and many adits have had their portals closed.

Granite quarrying: Dimension stone quarries have enormous finger dumps of large angular waste blocks trimmed from the main product. Quarries have vertical cliffs, corrugated iron sheds and deep, dark pools.

Other quarries, for roadstone, rab or slate, have fewer dumps - most of the excavated material being used.

China-clay works are dominated by massive pits and dumps, the oldest being finger dumps, replaced by the steep conical sky-tips and those in turn by the large ramped dumps that are increasingly being landscaped and replanted with heath and trees. Dressing floors are extensive and transportation systems are on a large scale. Abandoned pan kilns with slender chimney stacks are found on the edges of clayworks and on the defunct Bodmin Moor works.

## **Principal locations**

Extractive industries can, of course, exist only where their object lies. Mines, quarries and china-clay works tend to cluster around the granite outcrops; most large slate quarries are in the northern part of Cornwall.

### Variability

See historical background and components.

## Past interaction with other Types

Usually an imposition onto other Types as extractive industry is determined by the location of its object. So mines can be found in all other Types, even Settlements.

A number of Types were altered by historical processes associated with industry. Post-medieval Enclosures were partly stimulated in the 18th and 19th centuries by increasing and mobile labouring populations. The form of Anciently Enclosed Land (in particular, the enclosure of strips) was also affected by medieval industrialisation and the commercialisation of the general economy that followed. Some woodland and moorland has developed on abandoned industrial ground, or derelict land.

#### **Evidential value**

Archaeological recording (survey and excavation) has only recently been applied in a systematic way to industrial sites and complexes in Cornwall and the potential for discovering important features, recording, interpreting and presenting them is considerable. Most histories have as yet been technical (dealing with steam engines and other equipment) or economic (mine yields etc).

Ongoing historical, cartographical and archaeological work by the World Heritage Site office is drawing together information on Cornish mining in a systematic way

Medieval tinworks were fairly poorly documented before tin-sett bounding had to be registered at the end of the 15th century. The archaeological remains of streamworks and associated features have been intensively studied in recent years. Later tin and copper mines have received attention from historians and archaeologists as close as for any other type of site in Cornwall. Quarries are relatively neglected but even here individuals have undertaken detailed studies

Individual complexes can be researched in great detail and there remains much to be done in terms of documenting particular works. More work can be done on the social background of Cornish industry, in both the medieval and modern periods.

### Historical value

Most mines, quarries and clay-works develop over some time and there are usually traces of earlier technologies, plant, dumps etc among the remains of the latest. In some types of site, particularly quarries and clayworks, the earlier features may be partly devoured by later workings. Most extractive industries did not bother to remove traces of earlier features from the land they were exploiting. So fragments of earlier settlements and fields etc are often found within industrial complexes.

#### Communal value

The importance of Cornwall's metal mining heritage is recognised in the designation of the key areas as the Cornwall and West Devon Mining Landscape World Heritage Site (Gamble 2004). This reflects a cultural attachment among certain sectors of Cornish society with mining.

Complex feelings, to a great extent dependent on closeness to the industries, are generated by industrial remains. For many they are reminders of past employment and great days in Cornish history, when Cornwall was the hub of British tin and copper mining, granite quarrying and steam engine manufacture. Many are still inspired by the remains and industrial history and archaeology are rapidly growing interests in Cornwall. Others find industrial sites unattractive, dangerous and distinctly non-picturesque.

### **Aesthetic value**

Industrial remains can form some of the most distinctive landmarks in the Cornish landscape. Tall, steeply gabled engine houses with part-brick chimney stacks at their corners are considered by many to be Cornish icons, but other features have an equally profound impact. The finger dumps of granite quarries, the deep cuttings of streamworks, and the often scruffy, semi-derelict or overgrown industrial buildings, yards, lanes, tramways etc associated with extractive industry all establish mood and reflect meaning in the landscape.

### Potential for amenity and education

Industrial 'heritage' is a rapidly expanding element of the Cornish tourism industry. It is usually handled relatively well as the sites are potentially dangerous and competent and responsible people are therefore usually involved.

Education is involving children more in their area's industrial past and this process will only continue to increase with bodies like local authorities and the National Trust engaged in promoting the presentation of industrial monuments and complexes.

A key element of the World Heritage Site is the development of the potential for public appreciation and enjoyment of the mining heritage of Cornwall.

### Survival

Varies considerably. Some sites have been almost entirely destroyed, others are virtually intact, left with most features except equipment still in place, but most have seen some depredation, usually before Cornwall entered the post-industrial age and these features were recognised as meaningful by people living beyond their immediate neighbourhood.

### Vulnerability

Continually rising awareness of the value and importance of industrial remains will make them increasingly less vulnerable. Some receive protection through being Scheduled Monuments or Listed Buildings. The World Heritage Site may not be a statutory designation, but the status it confers means that moves to disturb industrial remains will generally be resisted.

Many sites fall within designated areas, especially AONBs and AGLVs.

### Forces for change

Presentation of sites to the public brings attendant threats to certain components. In particular, the making safe of mine sites often involves capping shafts, a process which is usually destructive of features around shaft-heads. Most derelict land reclamation in Cornwall is now usually preceded by an archaeological assessment and its execution is guided by archaeological recommendations.

Decay of structures will continue apace if they are not consolidated.

## Safeguarding the Type

Grants for consolidation and presentation should be encouraged. Statutory protection of the most important sites and complexes should be extended.

## **Communications**

## Introduction: defining/distinguishing attributes

Those main communication lines that are sufficiently large in area or significant in impact to be mapped at this scale. At the county level (1994 HLC types) this was generally only A and B roads, all railways and all operational airfields. When more detailed work was undertaken for the Lynher Valley HLC and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project, the Type was subdivided into the following subtypes (Herring and Tapper 2002; Val Baker 2003).

- Major roads
- Railways
- Airfields (active commercial; military airfields have been characterised as Military)
- Canals

## Principal historical processes

Clearly, the communications infrastructure of Cornwall is largely needs driven, but the locations established and routes taken are determined by a complex of factors including geographically determined ones (topography etc) and historical and tenurial ones. Roads have largely developed over centuries, with most of the main thoroughfares of Cornwall having been established by at least the later medieval period. The main exceptions are the modern by-passes and those leading to the Tamar crossings at Saltash and Torpoint. Principal roads are the spinal A30 and the A38 and A39 to its south and north.

Brunel's Royal Albert Bridge over the Tamar was opened in 1859 and allowed rail traffic to link Cornwall to Plymouth and the land to the east. Previously numerous local lines had developed, but the connections to London had a profound effect on Cornwall's economic viability and landscape development. Several lines, including the whole of the Launceston to Padstow Southern Railway complex, were axed and closed in the early 1960s.

The Bude Canal was created in 1819 to take sea sand to sweeten the farming country between Bude and Holsworthy and Launceston. Other canals were created between Liskeard and Looe, at Par and in the Lanherne Valley.

A few small civilian airfields were established in Cornwall just before the Second World War (St Just and St Merryn in 1937, Trebelzue in 1939). Many military airfields were created during or immediately after the War and one of these, St Mawgan developed into a significant joint military and civil airport, the latter now known as Newquay Airport. Other civilian fields are simple landing strips.

Telecommunications sites can also be extensive, notably the post-war complex, reusing a WW2 radar base, at Goonhilly Downs. Smaller complexes are generally not sufficiently extensive to be plotted.

## Typical historical and archaeological components

The main roads of Cornwall tend to have standardised furniture and features (cuttings, embankments, underpasses, bridges, barriers, signage etc), although the more recent stretches, such as that part of the A30 recently opened between Innis Downs and Indian Queens, have been designed with landscape impact more firmly in mind.

The main line railway (Paddington to Penzance) is still operational but many of the branch lines have been abandoned (1960s) and are now simple earthworks, some with traces of sleepers and railbeds.

Goonhilly Earth Station is dominated by its several massive satellite receiving dishes.

#### **Principal locations**

Roads and railways generally trend east to west, linking major population centres and industrial and port complexes.

# Variability

Variability in fabric and character is largely dependent on the scale and volume of movements.

## Past interaction with other Types

Railways more than the earlier roads were impositions on other HLC Types; their lines largely determined by operational constraints of gradients etc. They tended to avoid Ornamental land (the influence of local gentry having some effect) but ran over farmland and straddled valleys with great timber and stone viaducts. Some modern road improvements appear to be not dissimilar, being relatively insensitive to the underlying historic landscape as they strive to increase road speed while improving road safety (but note the efforts made to accommodate the recent A30 improvement). Earlier roads, however, were intimately connected to rural and urban settlements and threaded their way through the field systems and ran in straighter lines over previously unenclosed downlands.

#### **Evidential value**

Much more useful research can be undertaken on Cornwall's early long distance roads. Considerably more work has been done on railways although much of this is very particular and related to the mechanics and organisational detail. More could be done on the social and economic impact of railways, and more recently of air travel, in Cornwall.

#### Historical value

Roads running along medieval and earlier lines display considerable evidence for time-depth. As well as the variously aged associated structures and furniture (toll-houses, wayside pubs and other services, bridges etc) there are alongside them medieval or earlier hedges with ancient trees on their tops. The integrated, almost organic approaches older roads make to medieval settlements also nicely signifies their age.

Railways too are now old enough to have evidence for time-depth. When travelling by train people can see abandoned halts and viaducts.

Goonhilly Earth Station, being established on Upland Rough Ground, contains within its perimeter fence a number of archaeological features typical of such ground, notably barrows.

## Communal value

Many people see Cornwall mainly while on the move, from roads and railways, but also increasingly from the air. Regular travellers develop affection for particular views. Goonhilly is a popular destination for tourists and is a complex of which many Cornish people are proud.

## **Aesthetic value**

As noted above, this Type's importance lies as much in the way it takes people into and through the wider historic landscape as in the railway and road features themselves.

### Potential for amenity and education

Communications are largely facilitators for the appreciation of other parts of the historic landscape but they do possess many interesting and beautiful features. Bridges and viaducts may be the most dramatic but stations, roadside services (e.g. pre-War garages) and other infrastructure are also important and interesting elements in our landscape.

### Survival

The railways survive well, whether still operational like the main line or abandoned like the North Cornwall and Bude branches of the London and South-Western Railway and the Helston branch of the GWR. Roads are regularly upgraded and early features are often removed or obscured, but the routes of most have not been significantly altered and travellers still experience the historic landscape from broadly the same line (if not necessarily at the same speed) as their medieval and early modern predecessors.

# Vulnerability

Some roads and railways are within parts of the landscape that have national or county designations. There is probably greater pressure for change on roads, especially at the several bottle-necks on trunk roads.

## Forces for change

The future of the Plymouth to Penzance stretch of the mainline railway is occasionally reviewed. Its loss would obviously have a significant negative impact on the surviving infrastructure and would have quite profound effects on virtually all other parts of the historic landscape, not least the road network. The roads themselves can be expected to continue to be upgraded as deemed necessary to achieve shorter journey times and to improve road safety.

## Safeguarding the Type

Retain the Plymouth to Penzance main line railway. Try to retain historic lines in future road improvements so that roads retain their integrity in the landscape. Bear in mind the importance of views over the historic landscape when designing changes to roads; mitigate negative impact through sensitive design (see for example the recent guidance.

## Recreational

## **Defining attributes**

Late 19th and 20th century tourism and recreation features. Mainly golf courses, coastal chalet/caravan parks and theme parks. Smaller areas of recreational facilities are absorbed into other Types, particularly Settlement.

Following suggestions made in the 1998 review of HLC (Herring 1998), this Type has been subdivided into the following sub-types, and mapped as such for the Lynher Valley HLC and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Herring and Tapper 2002; Val Baker 2003).

- Golf courses
- · Campsites, chalet parks etc
- · Theme parks
- Car Parks

### Principal historical processes

Cornwall's tourism industry developed through the 19th century, aided by the introduction of railways. It had a largely seaside bias until the later 20th century when 'quality' tourism encouraged more visitors inland to 'heritage' sites and former industrial landscape.

Some golf courses were established in the later 19th century (Lelant, Bude, Rock, Bodmin, Falmouth and Newquay). Chalet parks were given a boost through the adaptation of Second World War hutted camps in the 1950s and 1960s.

## Typical historical and archaeological components

The chalet and caravan parks mainly comprise late 20th century standard structures served by simple concrete block ancillary buildings and tarmac or concrete drives. A few are of more interest, being early 20th century and with chalets which are almost vernacular (e.g. on Riviere Towan, Phillack and Freathy Cliff, Whitsand Bay).

Theme Parks vary in form and extent, but most have late 20th century concrete block buildings and many essentially temporary features. Golf courses are usually landscaped, with many earlier historical features removed or disturbed (e.g. field boundaries). Club houses and ancillary buildings are usually modern concrete structures.

All recreation sites have extensive car parks.

## **Principal locations**

Predominantly coastal, with dense clusters around certain stretches well-endowed with sandy beaches: Bude, Padstow-Perranporth, St Ives Bay, Mount's Bay, Looe. Golf courses exist near most towns.

### Variability

Chalet and caravan parks vary mainly in scale and type of location, not form, and most golf courses are also similar. Each theme park has its own angle.

## Past interaction with other Types

Recreation sites are usually impositions on earlier HLC Types. The establishment of golf courses in particular tends to involve the removal of historic field boundaries and the dilution of the agricultural character of former farmland.

In addition recreational types can also be seen to result from the intake of rough ground; for example the golf complex at Fistral Bay (Newguay) has developed upon former dune-land.

#### **Evidential value**

Although the tourism industry has had a profound impact on the county's recent economy, infrastructure and social structure, the potential for meaningful and relevant historical and archaeological research of the Recreation Type itself is relatively limited. Nevertheless, work on this neglected aspect of Cornwall's history should be encouraged.

#### Historical value

It will usually be possible to demonstrate the gradual growth of Recreation complexes. Most chalet/caravan parks obliterate earlier historical features and golf courses fragment them, retaining strategic portions as obstacles.

#### Communal value

Ambivalence is perhaps more pronounced here than in any other Type. Some people have an aversion to Cornwall's Recreation sites, not just because they are seen as blots on the landscape but also because they are the physical manifestations of the annual invasion of tourists bringing unwanted values, cars and noise to the county. For many people, recreation sites represent Cornwall's real economy, and security for the future. Visitors who have enjoyed glorious Cornish summer holidays develop deep affection for these sites and for Cornwall generally.

### **Aesthetic value**

Typically contributes significantly to Landscape Character.

### Potential for amenity and education

The Type is, of course, an amenity for many people, although it also reduces the amenity value of certain stretches of coastline or areas of inland Cornwall for others.

#### Survival

The Type is generally active and both the Type and the components within it survive well.

## Vulnerability

The Type normally receives no specific protection, although much falls within the AONB.

# Forces for change

Golf courses are still being created and chalet/caravan parks expanded. Theme parks are also still being established. Within the Type, gradual refurbishment and updating threatens some early features. Constraints on conspicuous development along Cornwall's coast are beginning to exert control on the locations and forms of Recreation complexes.

## Safeguarding the Type

The continued expansion of the Type should continue to be managed as a principal concern is that other Types are imposed upon and either damaged or destroyed by it. Screening (trees or shrubs) around camping and caravan parks will lessen their impact on neighbouring historic Types.

## **Military**

## **Defining attributes**

Extensive modern military complexes, securely fenced, including disused Second World War airfields. Some complexes are too limited in extent to be mapped in this Type; others have been considered to be secondary to more dominant historic Landscape Character Types.

Four subtypes have been identified (Herring 1998) and mapped in secondary work in the Lynher Valley HLC and the north Cornish coast HLC undertaken for the Atlantic Coast and Valleys Project (Herring and Tapper 2002: Val Baker 2003).

- Military airfields
- Barracks
- Artillery complexes
- Military communications

## **Principal historical processes**

Apart from military airfields (most of which are of the Second World War), most blocks of land of this Type are in the extreme south-east corner of Cornwall, near Plymouth and its naval dockyard and associated military complexes. This area has a long military history, Plymouth having been an important naval port since the later medieval period, but the present complexes are essentially modern in character, with the exception of Tregantle fort, which reuses a mid-Victorian site, and Pendennis which has remains from all periods since Henry VIII's time.

Cornwall has had important partly defensive sites since early prehistory. Neolithic hill-top enclosures are found on the granite uplands while Iron Age hillforts and contemporary cliff castles are more widely dispersed. All of these site types are now thought to have been less involved with defence than once assumed. They are seen as places for gathering communities together and for displaying status and symbols. Farming hamlets enclosed by ditch and rampart, known as rounds, are found throughout Anciently Enclosed Land and date from the Iron Age to the Romano-British period, with some being used into the Early Medieval period. Later medieval castles and post-medieval forts survive in towns, on the coast, along strategic routes, and at formerly important residences.

First World War airfields have reverted to agricultural land (HMS Bonython near Mullion; airships) and Crugmeer (near Padstow). Squadrons undertaking coastal defence, shipping protection, reconnaissance and bombing missions flew from the several WW2 airfields on the north coast, Davidstow Moor and the Lizard. Most were maintained for some time after the war, being used for coastal defence and training, before being either abandoned or used for civilian purposes (Davidstow Moor briefly as a car racing track). A few have been maintained by the military: Culdrose, St Mawgan, Predannack (small scale use) and Cleave (reused as the base for GCHQ Bude).

### Typical historical and archaeological components

Security concerns mean knowledge of active military sites is limited, but the Military areas plotted in the HLC are principally airfields (with runways, taxiing circuits, hangars, service sheds and secure perimeter fences and guarded gates),or radar and satellite stations, barracks and military fuel depots (near Torpoint).

#### **Principal locations**

Military complexes extensive enough to be plotted in HLC are typically former airfields (with a north coast bias in their distribution) or modern barracks and depots in the area associated with Plymouth Docks.

## Variability

Each Cornish installation had a particular function and therefore has a particular form.

# Past interaction with other Types

Military installations are normally impositions by the State on a landscape for strategic reasons and interaction with other Types is minimal beyond service relationships (victualling, recreation, some accommodation, etc).

#### **Evidential value**

As defence installations, the modern components are generally secret, but military features from earlier periods have received considerable attention from military historians.

As products of the nation state reaching down to the local level, military installations have considerable historical importance. The inherently competitive nature of warfare means that features change more rapidly in this sphere of human activity than most others and there is scope for much detailed archaeological research. English Heritage is supporting much archaeological recording and characterisation of later 20th century military remains.

### Historical value

Unless reusing earlier military sites (e.g. GCHQ on Cleave airfield) the evidence for time-depth is confined to earlier features (hedges, tracks etc) captured within secure fencing and not obliterated.

#### Communal value

Although fairly small pockets of land (excepting Culdrose and St Mawgan), the Type dominates both physically and, through security devices like fences, psychologically, the areas where it exists. Bases are accepted as traditionally appropriate features of the Plymouth district. The role of those who built and operated from airfields and other WW2 installations in defeating fascism is increasingly respected.

#### **Aesthetic value**

A Type which contributes to landscape character disproportionately to its scale.

### Potential for amenity and education

While operational, there will be little or no amenity use, but once decommissioned military sites have considerable potential.

#### Survival

As working installations, mainly with few earlier features or components, they survive well.

### **Vulnerability**

As noted above, earlier features are vulnerable to alteration or removal by changes in current installations. The armed forces take their responsibilities to historic buildings seriously.

## Forces for change

Defence cuts at government level threaten the existence of current installations. Decommissioning may involve the removal of dangerous or sensitive features. Perceptions of recent military landscape are changing rapidly as time elapsed from their currency increases and the fears surrounding their need are replaced by new sentiments.

## Safeguarding the Type

The MoD landscape managers should be informed of the historic importance of the bases and there should be close consultations on decommissioning to ensure the most thoughtful and imaginative reuse of these important complexes.

#### Reservoirs

(Text prepared in 1994/1996 and revised in 1998 and 2009 by Peter Herring)

## Introduction: defining/distinguishing attributes

Twentieth century water bodies retained by built dams, or smaller covered tanks. The former tend to be in uplands or in steep valleys, the latter close to towns, although most of these last are too small in extent to be covered by the HLC mapping.

### Principal historical processes

Large reservoirs were built mainly in the second half of the 20th century either as sources of water for local population centres or as reserves of water used to maintain flow in rivers from which water was abstracted. Public amenities generally obtained land by compulsory purchase. The reservoirs are very important as the most visible component of a major engineering feat of the 20th century, reflecting the sophistication, complexity and stability of a society that could bring piped water to virtually every household.

## Typical historical and archaeological components

Often inundate important archaeological features. Cornish dams are generally functional in design. Pumping stations, water treatment works etc are usually associated with the reservoirs. Smaller local reservoirs are often earlier and are sometimes enclosed with roofs.

### **Principal locations**

Tend to be on low-value agricultural land, especially in rough ground and steep valleys. Three of the largest are on Bodmin Moor: Colliford, Siblyback and Crowdy. Stithians is the largest to lie within predominantly enclosed land.

### Variability

Depends on size, materials and location. Dam forms vary as does the treatment in terms of planting, etc of the fringes of the water body.

### Past interaction with other Types

Help sustain inhabitants of Urban Development and Enclosed Land. Imposed on other Types, mainly Upland Rough Ground, and Post-medieval Enclosed Land.

#### **Evidential value**

Historical research may throw light on the methods of selection of sites and campaigns for resistance to the reservoirs. Archaeological information can be gleaned from the shorelines and, with more sophisticated planning constraints, there will be greater opportunities to undertaken detailed recording in advance of any future reservoirs (as at Colliford and in the Roadford Reservoir project in Devon).

### Historical value

Limited except where historical features, notably field boundaries, can be seen running into the water. Low water levels in dry periods may reveal features usually lost from view, and wave action at the edges can expose artefact scatters and other previously buried features.

#### Communal value

Highly valued by local populations who use them for leisure activities; sometimes disliked, especially when first built, by those who see them as damaging historical or beautiful landscape.

### **Aesthetic value**

Most important as an amenity and as a dramatic contributor to landscape character. Otherwise, tend to sterilise and interrupt historic landscape character.

# Potential for amenity and education

Amenity potential of reservoirs is great, not only for fishing and water sports but also as wildlife havens. The presentation of material recorded in advance of reservoir construction offers considerable potential (again, see Roadford Reservoir project).

#### Survival

The reservoirs and ancillary features will be in good condition, being maintained, but other historical features affected by them will generally be in poor condition.

### **Vulnerability**

The Bodmin Moor reservoirs are within the Cornwall AONB.

## Forces for change

None for extant reservoirs. The construction of dams and reservoirs is itself a major force for change in other Types.

## Safeguarding the Type

There is little to recommend for extant reservoirs. For projected reservoirs, detailed consultation with historic environment services is required, firstly in the consideration of location, to minimise damage to the historic landscape (using the information provided on all other Types as a guide) and, secondly, in organising an adequate programme of rescue recording of historical and archaeological components prior to inundation. Conservation of the existing water resource may be a less damaging policy than building more reservoirs.

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