

Spotters Guide: Enjoying Upland Archaeology



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What To Look For

Natural or man-made?

Does the feature stand out within the immediate landscape? Does it look odd? It is likely that a feature that does not 'look' natural is man-made. In general, natural 'lumps and bumps' have a less regular shape than man-made features.

Geology

Does the stone associated with the feature look the same as the natural stone in the area? If not, then it has been brought to the area. Also look out for artificial markings on stones – these may represent dressing of building stone, quarrying, rock art or boundary markers.

Associated features

Are there any similar features nearby? Archaeological features and monuments are often found close to features that are the result of the same activity and from the same time period. For example, if you have a small circular mound of stones, are there any close by? If there are, then your feature may be a cairn forming part of a cairn field (see leaflet: '[Cairns](#)'). Are there known features of a specific date close to the feature? Can you see evidence for stone robbing (of a cairn or disused building) in a wall?

Location

The location of a feature is also important in identifying it. Is the feature in a prominent position? Does it run parallel to an existing track? Does it appear to sit on a break of slope? In what direction does it face? What is the view? These questions help you to compare the feature with known examples, and also get you thinking about what sort of feature might occupy such a location. It is also useful to look at the current land use. Does this give you a clue to the nature and age of the feature? For example, are you looking at a pile of stones that are a result of modern quarrying, or a linear earthwork created as a result of a modern track way.

Vegetation

Bracken and heather can mask features in the upland zone. It is easier to spot features after a period of heather burning or brash cutting, or when the bracken has died down over winter. Whilst bracken can be damaging to the underlying archaeological deposits, it should not be removed to define the feature.

The height of vegetation can also give clues to buried features. Ditch features allow for better growth, often producing taller, dense vegetation. In areas where there is something impeding root growth, such as stone, the vegetation tends to grow less well. However, this is not always easy to spot on the ground and is particularly difficult to see in upland areas.

Erosion and burrowing animals

Soil erosion can reveal archaeological objects, features and monuments. The most common things to look out for in the eroded areas are objects, an increase in or discrete patch of stone, and a difference in the soil from the surrounding soils (for example colour and fragments of charcoal). The Bronze Age hut circles at Green Crag Slack were identified after fragments of walling were revealed due to erosion caused by sheep tracks. Similarly, burrows, although damaging to the features themselves, can also throw up this type of evidence indicating the presence of a man-made feature.

If a feature is actively eroding it is important that it is reported and recorded before it is lost. However, on no account should you dig into, or 'clean up' the eroding area as this may cause damage to the feature and in some cases the vegetation and the deposit (soil/peat).

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide



Feature (centre) on Baildon Moor, taken in early May



Feature (centre) on Baildon Moor, taken in September

Research Tools

National Monuments Record (NMR)

The NMR's national historic environment database can be searched for already recorded sites (www.heritagegateway.org.uk/gateway). By inputting the co-ordinates of the location you wish to search and selecting 'PastScape' (under the 'Resources' tab), a list is generated of all recorded sites within your chosen radius.

Current and historic maps

Maps not only show natural and man-made features (the 'lumps and bumps'), but also identify features such as 'cairn', 'tumulus', 'earthwork', 'mine', etc. It is worth looking at a range of maps from modern Ordnance Survey to earlier maps as the information included may vary, and levels of detail may differ. Place name evidence is also useful. The name of a field, hill, etc., may provide an insight into past land use or settlement, for example 'Slate Pit Hill' on Todmorden Moor is sited not far from a disused quarry. (A useful resource for Lancashire is: mario.lancashire.gov.uk/agsmario)

Aerial photographs

The most accessible source of aerial imagery is Google Earth (www.google.co.uk/intl/en_uk/earth/index.html). Aerial images that have been taken at different times of the year and in different conditions are easy to view from your computer.

Both sun and snow can accentuate features. Sun will produce highlights and shadow – what feature the highlight/shadow represents is dependent upon the direction of the sun. Snow also highlights features where it has accumulated and therefore taken longer to melt. This can also be seen on the ground.

Libraries and archives

Maps, documents and images, including aerial photographs, are kept in regional archives.

Greater Manchester Archives and Local Studies

www.manchester.gov.uk/info/448/archives_and_local_studies

Lancashire Record Office

www.lancashire.gov.uk/corporate/web/?siteid=4528&pageid=30539

West Yorkshire Archive Service

www.archives.wyjs.org.uk

Libraries with significant local studies sections include:

Hebden Bridge - Cheetham Street, Hebden Bridge HX7 8EP

Sowerby Bridge - Hollins Mill Lane, Sowerby Bridge, Halifax HX6 2QG

Todmorden - Strand, Rochdale Road, Todmorden OL14 7LB

Local and regional societies

There are several societies in the area that provide a good source of information, both on their websites and within their membership. They also organise talks and field trips which may be of interest.

The West Yorkshire Heritage Forum (wyhf.wordpress.com) is a good place to find out about different societies, projects and events across the area.

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide



Castleshaw Roman Fort taken from the air. The sun is in the top left of the photograph and highlights the earthwork, with shadows falling to the lower right. The fort is visible in the centre (copyright: GMAU)



Castleshaw Roman Fort taken from the ground after snow. The snow takes longer to melt in more sheltered areas (i.e. by the sides of raised areas) and has highlighted some of the earthworks associated with individual structures within the fortlet

Protecting The Archaeological Resource

The best way to protect archaeological features is to leave them as you have found them. Some areas and features of special significance and value are protected by law. These include areas protected for their wildlife and/or geological importance, named Sites of Special Scientific Interest (SSSI), and nationally important monuments and buildings which are either Scheduled Monuments or are placed on the Statutory List of Buildings of Special Architectural or Historic Interest (often termed 'Listed Buildings').

It is important that all areas are treated with respect and the following list should not be seen as restrictive to your enjoyment of the archaeological resource. Instead, they should be considered simple measures that ensure the preservation of the resource for current and future generations.

If you do find that a feature or monument has been damaged (by human means, for example graffiti, theft, vandalism, etc.) you are encouraged to register this on the Moorwatch website: www.moorwatch.com

DO NOT

Remove or clear back vegetation from the feature

Whilst it is tempting to define the feature, the vegetation often acts as a protective layer. Removal of this layer may damage underlying archaeological deposits and exposes the feature to weathering which will damage the feature.

Dig on or around the feature/find

This exposes otherwise protected archaeological deposits. By exposing these deposits, the underlying burial conditions change and preservation of buried deposits and materials may be at risk.

Disturb stone features

Removing or adding stone to a feature damages it by changing its form. It is also detrimental to try to clean stone features (even with water), to highlight features on the stone, or to make rubbings of features, as these all can cause damage to the surface of the stone.

Light fires or drop cigarette butts

Fires are not only damaging to the feature and its associated buried deposits, but are also devastating to plants and animals.

DO

Check land access and any access restrictions

Under the 'Countryside and Rights of Way Act, 2000' (CRoW), the public have the right to access land on foot. However, access may be restricted for reasons including land management (for example nesting seasons) and safety (for example shooting). It must be remembered that whilst all land is accessible for you to walk across, you are trespassing if you stray from this. (This includes picking up objects which is theft!) If the land is not publicly accessible, then you must seek the landowner's permission before visiting the area.

The Natural England website gives further information concerning any restrictions to open access land and also a link to an interactive map (www.naturalengland.org.uk/ourwork/enjoying/places/openaccess/default.aspx). This map allows you to search an area for a given date providing information on CRoW access and any restrictions/exclusions that may apply. Another useful resource is the interactive map on DEFRA's MAgIC website (magic.defra.gov.uk/).

Take photographs

It is useful to use something for scale (depending on the size, a coin or ruler; a person is also useful in giving a relative

sense of scale), but remember not to disturb the feature itself.

Note the location of the feature/find

Record the map or GPS co-ordinates. If you do not have a map or hand-held GPS unit, then make a note of landmarks close to the feature and what you can see in each direction. A sketch map is ideal.

Record the feature

A short written description of the feature, including size, shape, vegetation, and noting associated or nearby features is useful when reporting the feature. Remembering not to disturb the feature, vegetation or associated deposits in any way!

Report any damage of archaeological features

This is very important and can help the relevant bodies to monitor and protect the vast array of archaeological features in the area. This is easily done through the Moorwatch website: www.moorwatch.com

And most importantly, enjoy learning how to recognise and identify archaeological features.

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Reporting Discoveries

Features

Known archaeological sites are listed in the Historic Environment Records (HER). For the South Pennines these are held across three counties: West Yorkshire, Greater Manchester and Lancashire. The list is not exhaustive and records are updated with new finds and discoveries. If you think you have located a new site, it is best to first check against the entries on the National Monuments Record (www.heritagegateway.org.uk/gateway) before reporting it to your local HER.

Objects

The uplands were settled from the early prehistoric, however the evidence for this period is very patchy. The best evidence comes from worked pieces of flint and chert. Other objects are also found including pottery from all periods and metal finds. For information on identifying objects, see:

www.archaeology.wyjs.org.uk/wyjs-archaeology-identifying-r.asp

Objects found on the surface or brought to the surface, for example through

ploughing or by rabbits, remain the property of the landowner. If you should pick up an object found lying on the surface, a note should be made of its location (co-ordinates/sketch map noting key features in all directions). The find should then be reported to the local Finds Liaison Officer (see: finds.org.uk). On no account should an object be dug out of the ground. This may damage the object and its burial environment (particularly if it is an archaeological feature). It also destroys the important relationship between the object and its burial environment that can give clues to its age and function.

Any finds of gold, silver or base metal, or groups of coins from the same finds spot are classed as 'Treasure' and as such must be reported under the 1996 Treasure Act. The Portable Antiquities Scheme (finds.org.uk) can offer advice, and also catalogues finds (not only those regarded as 'Treasure'). However, due to the importance of locating and understanding early human activity, finds should be reported to the local HER or to the Portable Antiquities Scheme.

Historic Environment Records Offices

Greater Manchester Archaeological Advisory Service -

www.salford.ac.uk/built-environment/research/applied-archaeology/greater-manchester-archaeological-advisory-service

Lancashire County Archaeological Service -

www.lancashire.gov.uk/corporate/web/?siteid=4398&pageid=19836

West Yorkshire Archaeology Advisory Service -

www.archaeology.wyjs.org.uk/wyjs-archaeology.asp

For further information, please visit the Watershed Landscape Project website:

www.watershedlandscape.co.uk/spotters-guide



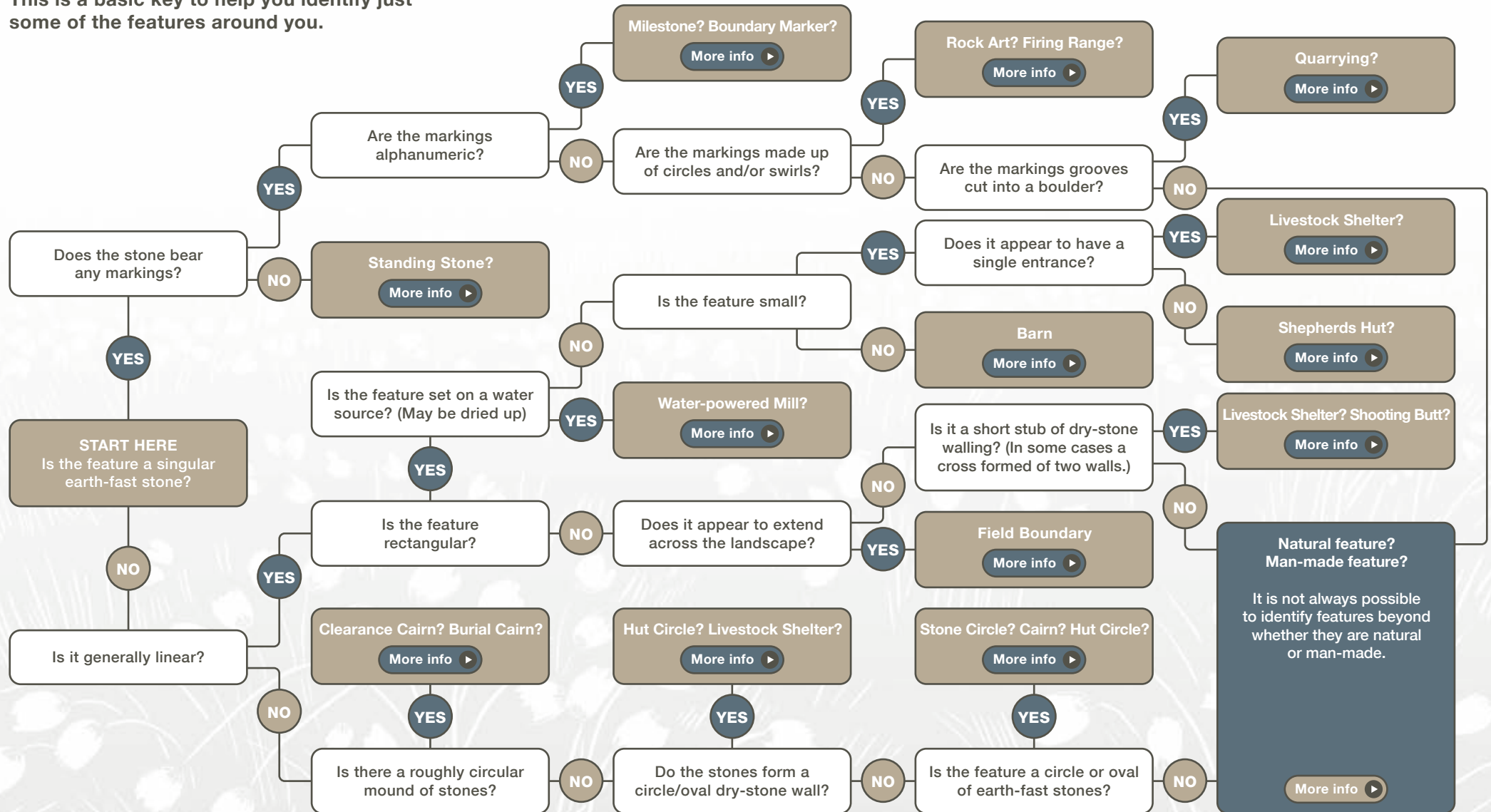
A selection of early prehistoric flint tools



Judd Walls on Oxenhope Moor. These walls made from discarded stone from the quarry and are built to retain waste material from the quarrying activity

Spotters Guide: Stone Features

This is a basic key to help you identify just some of the features around you.



Agricultural Features



Ancient and Medieval fields

Sometimes referred to as 'Celtic fields', these fields are difficult to date and some may be as early as the Late Neolithic. What is generally visible today is the result of post-medieval 'Parliamentary enclosure' and subsequent modern agricultural practice, although examples of Medieval 'Strip fields' can still be seen.

Boundary marker

Stones used to denote boundaries. These include private land, counties, towns, common land, etc.

Ditches

Negative features used to define monuments, form boundaries and to act as drainage.

Lynchets

Bank or ridge on a hill slope, running around the hill. Formed as a result of ploughing above. Some have been purposefully made to create 'platforms' on the hill slope for cultivation (also termed 'cultivation terraces').

Ridge and furrow

Remains of a ploughed Medieval field.

Misidentification

Modern drainage ditches

These are machine-cut in regular, rectilinear patterns.

Natural ditch-like features

Long-dried river beds are less regular than hand-cut ditches.

19th century ploughing

These are often much wider or much narrower than Medieval ridge and furrow. The alignment of the 19th century ploughing respects one or more of the current field boundaries.

Associated features

These features are seen in association with each other. Occasionally, features associated with the 'ritual' landscape may be seen in the area representing the use and reuse of the location.

Barrows and cairns may have been reused as boundary markers (see leaflets: '[Barrows](#)' and '[Cairns](#)').

Barns and settlements may also be present close-by (see leaflets: '[Structural Remains](#)' and '[Hut Circles](#)').

Protection

These features are best preserved by being left *in-situ*.

Vegetation should be left and not removed or pulled back to define the feature.

Further reading

Moorhouse, S. 2003. Anatomy of the Yorkshire Dales: decoding the medieval landscape. In Manby, T.G., Moorhouse, S. and Ottaway, P. (eds.) *The Archaeology of Yorkshire: an assessment at the beginning of the 21st century*. Leeds: Yorkshire Archaeological Society. 293-362.

www.english-heritage.org.uk/publications/iha-field-systems

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Identification



Ancient and Medieval fields

Often identified by the presence of earthworks surrounding the field. These were formed due to the build up of soil from ploughing. Fields are very difficult to date and vary in form. As well as earthworks, field boundaries may consist of dry-stone walls, rough rubble boundaries, and turf-backed walls. 'Strip fields' are narrow, cultivated strips of land (ploughing evidenced by ridge and furrow is sometimes visible).

Boundary marker

Some may be obvious and are made of dressed stone and bear an inscription. This may be initials, a date, or carry an obvious meaning. Sometimes, boundaries were marked by unmarked large stones and boulders. It is almost impossible to recognise these now.

Ditches

Man-made ditches are cut in a fairly regular manner. They are often accompanied by a bank formed from the upcast material from the ditch. These banks do not always survive, the material removed for other purposes, or the area having been subject to levelling. Natural processes may also see the soil from the bank wash into the ditch, making both features shallower.

Lynchets

Bank or ridge on the down slope of a hill. Formed by soil movement and erosion as a result of ploughing above, or from the creation of cultivation platforms (also referred to as 'terraces').

Ridge and furrow

Long linear 'banks and ditches' running parallel and close together. The feature resembles corrugated metal. They may not respect the current field boundaries as they are part of the Medieval pre-enclosed fields. Often more visible from a distance and can show up well on aerial photographs. Narrower 'ridge and furrow' are called 'cord rigs' and are earlier.

Images

Top: Strip fields seen in the distance from Top Withins, Haworth

Bottom Left: Ridge and furrow as evidence of Medieval ploughing (copyright: Daniel Bashford)

Bottom Right: Lynchets on Todmorden Moor

Barrows



Barrows

Man-made mounds that seal a burial/s or cremation/s. Generally these form part of earlier prehistoric burial practice.

Misidentification

Natural mounds

It can be difficult to differentiate between a natural and a man-made mound. If the mound is eroding, look for elements of stonework and artefacts on the surface of the site of erosion (remember not to dig into the mound).

Mineral extraction activities

Spoil heaps formed as a result of mineral extraction may be confused with barrows, particularly when overgrown. It is sometimes possible to see the material forming the mound. In the case of a spoil heap this may include material from much lower down in the geological sequence (see leaflet: '[Mineral Extraction](#)').

Associated features

Barrows are considered part of the prehistoric 'ritual landscape' formed of features including avenues, henges, enclosures, carved rocks, and stone circles. Round barrows are sometimes associated with domestic activity (fields and settlements) and often represent occupation at the location over a long period of time (see leaflet: '[Agricultural Features](#)'). Round barrow cemeteries often include ring cairns (see leaflet: '[Cairns](#)').

Protection

The best method of preserving these features and their underlying archaeological deposits for the future is to leave them *in-situ*.

Vegetation should be left and not removed or pulled back to define the feature.

Further reading

Manby, T.G., King, A. and Vyner, B. 2003. The Neolithic and Bronze Ages: a time of early agriculture. In Manby, T.G., Moorhouse, S and Ottaway, P. (eds.) *The Archaeology of Yorkshire: an assessment at the beginning of the 21st century*. Leeds: Yorkshire Archaeological Society. 35-113.

www.english-heritage.org.uk/publications/iha-prehistoric-barrows-burial-mounds

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Barrows

Identification



Barrows

These man-made mounds often contain stonework which is covered over with earth and turf. Often, the erosion of the overlying earth and turf reveals the underlying stonework. The mounds are generally regular and occupy prominent positions in the landscape. Barrows are considered to also act as boundary or territorial markers. Occasionally natural mounds have been modified and used as burial mounds. Barrows may appear on Ordnance Survey maps marked as 'Tumulus'. Groups of barrows are referred to as 'Barrow cemeteries'.

Long barrows

Elongated mounds of earth. Excavation has shown that they contain differing interior 'features' and often contain several individuals. Long barrows represent Neolithic burial activity.

Round barrows

Circular and oval mounds associated with the Early Bronze Age. These barrows are sometimes surrounded by a ditch or/and bank. Excavation has shown that these barrows are associated with the burial of an individual.

Images

Top: Example of a round barrow set within the landscape. Note how it looks like a small hill (copyright: Daniel Bashford)

Bottom: Round barrow on Roundhill, Middleton Moor (copyright: Richard Stroud)

Cairns



Cairns

Cairns can represent either field clearance or burial activities.

Clearance cairn

Formed when stones have been cleared from an area to a pile, often to clear a field for agriculture. These are difficult to date with some examples representing post-medieval/modern clearance.

Burial cairn

A site of a burial (either crouched burial or cremation) that is then covered over with stones. These sites date to the early prehistoric period (typically Late Neolithic/Early Bronze Age).

Misidentification

Natural stone piles

Formed as a result of glaciation. Stone will be irregular in nature with a wide range of sizes from very small to very large.

Stone circle

The visible remains represent a robbed cairn with only the stone kerb remaining, or a partially robbed ring cairn. Stones may extend downwards into subsoil and be larger than most individual stones within a cairn.

Modern cairns

These vary in size and shape and are often used as summit or way markers. May contain non-local stone transported by people from further downslope.

Modern stone piles

A result of modern clearance or quarrying. Stones may be larger than could easily be moved by hand due to the use of modern

machinery. Stones may show machine tool marks or blasting marks. Look for adjacent evidence of quarrying.

Very degraded structures

Buildings that have been robbed of stone may appear as a shapeless mound.

Associated features

Both clearance and burial cairns can be found in groups of the same type (clearance cairns – cairn fields / burial cairns – cairn cemeteries).

Protection

The best method of preserving these features and their underlying archaeological deposits (particularly burial cairns) for the future is to leave them *in-situ*.

Stones should neither be added nor taken away from the feature.

Vegetation should be left and not removed or pulled back to define the feature.

Further reading

Manby, T.G., King, A. and Vyner, B. 2003. The Neolithic and Bronze Ages: a time of early agriculture. In Manby, T.G., Moorhouse, S and Ottaway, P. (eds.) *The Archaeology of Yorkshire: an assessment at the beginning of the 21st century*. Leeds: Yorkshire Archaeological Society. 35-113.

www.english-heritage.org.uk/publications/iha-prehistoric-barrows-burial-mounds

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Cairns

Identification



Cairns

A man-made accumulation of stones forming a roughly circular or oval mound. These vary in size, and may be low with little stone visible through the overlying vegetation. Some cairns have their locations marked on Ordnance Survey maps. It is often difficult to differentiate between clearance and burial cairns.

Clearance cairn

Generally smaller and more irregularly-shaped than the burial cairns, representing a non-formal construction (i.e. stone has been randomly added to the pile). They are sometimes found in groups, termed 'cairn fields'. These groups may include one or more burial cairns. Some prehistoric clearance cairns have been found to contain burials. Clearance cairns may also represent boundary markers.

Burial cairn

Often larger, more regular in shape than clearance cairns and typically found occupying prominent positions. The size of individual stones may be more consistent. A cluster of burial cairns is referred to as a 'cairn cemetery'. A ring of stones ('stone kerb') may be visible, particularly if much of the infilling stone has been robbed. Other examples of burial cairns include 'Ring cairns'. These are rough, continuous stone circles with no stone infilling the circle. These do not always contain burials, but are thought to represent ritual activity.

Images

Top: Small cairn on Todmorden Moor. The small mound appears to be partly formed of stone. The mound of stone on the top appears to be a later addition

Bottom Left: Cairn on Ilkley Moor. Although obscured by heather, a circular mound is visible with stone in the centre

Bottom Right: Small ring cairns set within a stone circle (copyright: Daniel Bashford)

Carved Rocks / Rock Art Panels

Rock art

The term 'Rock art' refers to all graphical markings on stone, whether carved or painted. In this region, the markings are carved into stone. These mysterious markings may have had a symbolic, ritual, or domestic function.

Misidentification

Later carved rocks

These can be difficult to spot, but markings have been made on stones throughout history to the present day.

Natural markings

Rocks displaying features that have a non-human origin (e.g. weathering, animal activity, natural geology, etc.)

Military activity

Bullet holes and shrapnel damage as a result of military training (see leaflet: ['Military Remains'](#)).

Associated features

Prehistoric (Late Neolithic/Early Bronze Age) carved rocks are often found close to cairns, standing stones, other carved rocks, and form part of the prehistoric landscape. Lithic finds may also be present in the area.

Protection

The carved rock is best preserved in the state it was found.

Vegetation should be left undisturbed and not removed or 'pulled back' to define the feature or further investigate the motifs.

The surface should not be cleaned, even with water, and nothing should be used to mark the features. Even taking a simple rubbing of the stone can damage the surface.

Further reading

Boughey, K.J.S. and Vickerman, E.A. 2003. *Prehistoric Rock Art of the West Riding. Cup-and-Ring-Marked Rocks of the Valleys of the Aire, Wharfe, Washburn and Nidd*. Wakefield: West Yorkshire Archaeology.

www.english-heritage.org.uk/publications/iha-prehistoric-rock-art

www.archaeology-safaris.co.uk/project-arap.html

archaeologydataservice.ac.uk/era/rockart.ncl.ac.uk

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Identification



Carved rocks

Markings consist of a motif or series of motifs carved or pecked into the surface of the stone. The stones vary in size. Some are large boulders deposited during glaciation, others are fairly small and may not be in their original location.

Smaller, 'portable' carved stones are sometimes found within cairns (see leaflet: '[Cairns](#)'). Motifs comprise grooves, rings, circles, and can appear both as an individual marking on the stone, or together with similar or a combination of motifs.

The most common motifs are the 'cup' (a shallow, circular depression, sometimes referred to as a basin) and the 'cup and ring' marks (a 'cup' set within one or more concentric circles).

The extent of the marking can vary from a single cup, to a surface covered with carvings. Carved rocks appear to date to the Late Neolithic/Early Bronze Age.

Images

Top: The Idol Stone, Ilkley Moor

Bottom Left: Small carved stone bearing three cups, Rivoock

Bottom Right: The Haystack Stone, Ilkley Moor. The stone bears a series of carvings which represent graffiti from the prehistoric to the present day

Hut Circles



Hut circles

The remains of prehistoric settlement. In upland areas these are considered to represent settlement up to the middle Bronze Age when the climate became colder and less desirable, and people moved to the lower lying areas.

Misidentification

Hut circles may be confused with robbed cairns, ring cairns, eroded barrows and stone circles (see leaflets: '[Cairns](#)', '[Barrows](#)' and '[Stone Circles and Standing Stones](#)').

Associated features

Hut circles are often found in association with fields (look out for clearance cairns - see leaflet: '[Cairns](#)').

Protection

The best method of preserving these features and their underlying archaeological deposits for the future is to leave them *in-situ*.

Vegetation should be left undisturbed and not removed or 'pulled back' to define the feature.

Further reading

www.english-heritage.org.uk/publications/iha-prehistoric-romano-british-settlements-structures

For further information, please visit the Watershed Landscape Project website:
www.watershedlandscape.co.uk/spotters-guide

Hut Circles

Identification



Hut circles

A circle or oval of dry-stone walling with a single entrance. The structure may survive as a circular or oval earthwork with occasional stone visible in the earthen bank. These structures vary in size and may appear in isolation, or form part of a group (or 'village').

Images

Top: Remains of hut circles (copyright: Daniel Bashford)

Bottom: Hut circle, Askwith Moor. The low circular feature is made up of rough stone and earth (copyright: Richard Stroud)

Military Remains

Military remains

The moorland was used extensively during WWII for training purposes. The evidence is likely to relate to the activities of the Home Guard. In addition to military training, the moorland was used for searchlight batteries and as bombing decoys. A number of plane crash sites are known throughout the South Pennine region.

Misidentification

Bullet holes may be misidentified as carved rocks (see leaflet: [Carved Rocks / Rock Art Panels](#)).

Protection

The best method of preserving these features is to leave them *in-situ*.

Vegetation should be left undisturbed and not removed or 'pulled back' to define the feature.

Be aware

Under no circumstance should a mortar be picked up and certainly not pulled out from the ground. Some of these are unexploded and may contain white phosphorous which causes burns, or the highly explosive material amatol.

Further reading

Dobson, C. 2000. *Fields of Deception - Britain's Bombing Decoys of World War II*. London: Methuen.

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Identification



Bombing decoy sites (Starfish sites)

Areas of land close to possible targets (cities, factories, etc.) that were intentionally set alight in order to fool German aircraft into thinking the area had already been hit. Features that remain include control bunkers, ditches which acted as fire-breaks and sometimes gun emplacements.

Firing ranges

These can be identified by the bullet holes and shrapnel damage to stone. This is evident at disused quarries. Tail fins from two inch mortars and cartridge cases are found across the area.

Image

Bullet holes and shrapnel damage to a stone quarry. Hangingstone Quarry, Ilkley Moor

Mineral Extraction



Mineral extraction

The mineral wealth of the South Pennine uplands was exploited from the Medieval period and became an important resource during the 18th and 19th centuries, underpinning the textile industry. The range of materials included coal, clay, fireclay, ironstone, lime, and ganister. The methods of extraction include mining and quarrying.

Misidentification

Earthworks associated with quarrying are difficult to tell apart from other earthworks. However, they are likely to be more irregular than earthworks associated with field systems and hut circles (see leaflets: '[Agricultural Features](#)' and '[Hut Circles](#)').

Associated features

Mineral extraction activities will be associated with a track way or road for transporting the material away from the site of extraction (see leaflet: '[Roads and Track Ways](#)').

Protection

The best method of preserving these features and their underlying archaeological deposits for the future is to leave them *in-situ*.

Vegetation should be left undisturbed and not removed or 'pulled back' to define the feature.

Be aware

Care must be taken when investigating shafts as the bottom of the feature may not be well sealed.

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Identification



Adit

A tunnel entrance into the side of a hill for the purpose of extracting mineral resources. Termed drift mining. These features are sometimes seen as channels cut into the ground surface up to the hill face. They are angled downwards from the entrance to aid drainage of the tunnel.

Bell pits – see *Shafts*

Hushing

A method of exposing ore by first storing, then releasing a large body of water over a targeted area (often a steep slope). The force of the water strips the area revealing the ore. Evidence of this activity is seen as 'hush gullies'. Sometimes a dam is visible at the top of the stream.

Quarrying

Evidence of quarrying can be quite obvious, with large 'chunks' of an area having been removed and still clearly visible. It can also be harder to spot and may be seen as odd-shaped earthworks representing shallow extraction pits and spoil heaps. Large stones may have grooves cut into them. These grooves are the remains of an attempt to split the using a technique called 'plug and feather'. Holes were hand-drilled into the stone, and a wedge (the plug) and two shims (the feathers), set either side of the plug, were driven into the hole to split it.

Shafts

Shafts may be the remains of bell pits, ventilation shafts, or extraction activity. The tops of shafts are circular or oval depressions with a mound or 'rim' around the circumference at ground level. Some may have a platform or 'apron'. It is likely that this is where winding gear was sited. They are often found in groups. The feature varies in size and depth.

Spoil heaps

Accumulations of material usually sited next to a depression. These heaps sometimes taper away from the associated depression. The spoil comprises geology from deep below ground which is not the same as the surface geology.

Images

Top: Adit (drift mine entrance), Todmorden Moor

Bottom Left: Evidence of secondary stone working using the 'plug and feather' technique, Oxenhope Moor

Bottom Right: Hush gullies at Shedden Clough (copyright: Steve Morgan)



Roads and Track Ways



Hollow-way

A route way that has been carved into the ground surface by continued use.

Milestones

Stones placed along a road or track to show direction and distance to villages and towns. The earliest milestones are Roman and sometimes only bear the name of the emperor. After this time, milestones were not in use until the mid 18th century.

Military roads

Roman roads built for the movement of the army. Some are thought to have been earlier track ways adopted by the Romans.

Pack-horse bridge

Narrow, stone bridge associated with pack-horse routes.

Pack-horse route

Narrow route ways primarily used by pack-horse traders. These continued in use until the latter part of the 19th century.

Pinch-point

A convergence of tracks or roads associated with an obstacle e.g. bridge.

Associated features

These features are found in association with one another. They are also associated with settlements and industrial features (see leaflets: '[Mineral Extraction](#)' and '[Water Management](#)').

Protection

Vegetation should be left undisturbed and not removed or 'pulled back' to define the feature.

Further reading

Raistrick, A. 1978. *Green Roads in the Mid-Pennines*. Buxton: Moorland Publishing Company.

www.english-heritage.org.uk/publications/iha-preindustrial-roads-trackways-canals

www.milestonesociety.co.uk

For further information, please visit the Watershed Landscape Project website:

www.watershedlandscape.co.uk/spotters-guide

Identification



Hollow-way

Where these survive and have not been infilled, they appear as depressions cut through the landscape. They are a result of constant use that has worn away the ground surface, forming a bowl-like depression.

Milestone

These stones generally carry a place name, directional arrow and the number of miles.

Military roads

These route ways are best identified by the places they pass through and the towns that they join together.

Pack-horse bridge

Narrow, stone bridge often with a high arch and low sides. Some are of more simple construction.

Pack-horse route

These are typically narrow route ways cut through the landscape. Some survive as metalled roads and tracks, others as hollow-ways. They are likely to be interspersed with pack-horse bridges.

Pinch-point

Seen as a series of route ways that come together at the site of an obstacle. After the obstacle, the series of route ways head in different directions. Obstacles may include steep slopes and rivers.

Images

Top: Milestone on Cupwith Hill, Marsden

Bottom Left: Historic route-way (copyright: Daniel Bashford)

Bottom Right: Packhorse bridge, Oxygrains Old Bridge



Stone Circles and Standing Stones



Standing stone

Often difficult to date and to understand function. It is thought that they may represent boundary or territory markers, grave-markers, or hold some other ritual significance.

Stone circles

Mysterious features considered to have a ritual function. Dated to the Late Neolithic/Early Bronze Age.

Misidentification

Stone circles may be confused with robbed cairns, ring cairns, eroded barrows and hut circles (see leaflets: [‘Cairns’](#), [‘Barrows’](#) and [‘Hut Circles’](#)).

Associated features

These features are part of the early prehistoric ritual landscape and may be seen in isolation or in association with cairns, barrows and carved rocks (see leaflets: [‘Cairns’](#), [‘Barrows’](#) and [‘Carved Rocks / Rock Art Panels’](#)).

Protection

The best method of preserving these features and their underlying archaeological deposits for the future is to leave them *in-situ*.

Vegetation should be left undisturbed and not removed or ‘pulled back’ to define the feature.

Further reading

Scarre, C. 2007. *The megalithic monuments of Britain and Ireland*. London: Thames & Hudson.

www.english-heritage.org.uk/publications/iha-prehistoric-henges-circles

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www.watershedlandscape.co.uk/spotters-guide

Identification



Standing stone

Stone that has been set upright in the ground. These vary in size and shape.

Stone circles

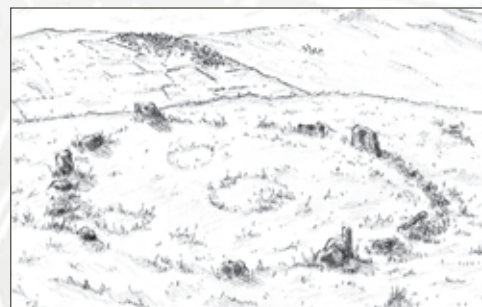
A circle or oval of stones that have been set into the ground. These features vary in size, both in terms of the stone used and the size of the feature itself.

Images

Top: Standing stone, Midgley Moor

Bottom left: Twelve Apostles stone circle, Ilkley Moor (copyright: Richard Stroud)

Bottom right: Small ring cairns set within a stone circle (copyright: Daniel Bashford)



Structural Remains



Barn

Structure for storing or processing agricultural produce or for housing livestock.

Livestock shelter

Dry stone walls or enclosures built to protect livestock from wind and snow, sometimes referred to as a 'bield' (*bield* meaning shelter), or sheep fold.

Shepherds huts

Temporary structures or 'shielings'. These are the remains of seasonal huts used whilst looking after livestock.

Shooting butt

Unroofed structures used for grouse shooting.

Misidentification

It can be difficult to distinguish these features from one another.

Associated features

Barns, livestock shelters and shepherds huts may be seen in association with each other and with elements of other agricultural activity (see leaflet: '[Agricultural Features](#)').

Protection

The best method of preserving these features and their underlying archaeological deposits for the future is to leave them *in-situ*.

Stones should neither be added nor taken away from the feature.

Vegetation should be left and not removed or pulled back to define the feature.

Further reading

Moorhouse, S. 2003. Anatomy of the Yorkshire Dales: decoding the medieval landscape. In Manby, T.G., Moorhouse, S. and Ottaway, P. (eds.) *The Archaeology of Yorkshire: an assessment at the beginning of the 21st century*. Leeds: Yorkshire Archaeological Society. 293-362.

www.english-heritage.org.uk/publications/iha-shielings

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Identification



Barn

Rectangular stone-built structure. The interior may include stalls for livestock. The structure may survive as the partial remains of walling and/or rectangular earthworks.

Livestock shelter

Survives as walls or earthworks. The size and shape varies depending on the livestock for which it is intended. Enclosures may be rectangular or curved and have one entrance/exit. These are sometimes found accompanied by walling or earthworks for channelling the sheep into the fold. Some shelters are short lengths of dry stone walling, or a cross formed of two walls.

Shepherds huts

Small, rectangular earthworks or stone walling.

Shooting butt

Unroofed, stone-built structure. The form varies and may be rectangular or circular. Some butts are maintained and are still in use, whilst others may only survive as remnants of walling. Other structures in the landscape have been reused as butts, e.g. livestock shelters.

Images

Top: Reconstructed sheep fold, Turley Holes Moor near Hebden Bridge

Bottom Left: Livestock shelter formed of dry stone walls (copyright: Daniel Bashford)

Bottom Right: Derelict farm buildings, Oxenhope Moor. Some partially standing walls are clearly visible, others are visible as earthworks

Water Management

Conduits

Channels for collecting and conveying water to reservoirs.

Water-powered mill

Mills are classified by the direction of the waterwheel (horizontal or vertical) and were primarily used for grinding grain. From the Medieval period, mills began to be used for other industrial purposes, a practice that expanded in the post-medieval period. The water-powered mills were either sited on a river, or had a man-made channel or conduit (termed a 'fall trough' or 'goit') taking water from a river to a mill pond.

Reservoirs

A man-made method of holding or storing water dating back to the 19th century. Reservoirs that are no longer in use, such as the example on Baildon Moor, are referred to as 'redundant'.

Temporary dams

These were used to control water by holding it back.

Water diversion features

Intentional change in the direction of the flow of a stream or river. The diversion may take the water to a holding area or mill pond, or may ensure the flow of the water source below ground.

Misidentification

Negative features such as fall troughs, mill ponds and conduits may be confused with other negative features such as ditches, trenches and hollow-ways, particularly if they have dried up. These features are prone to silting up and extensive vegetation growth, and may therefore not represent their original shape or size.

Associated features

These features may be found in association with one another, particularly those associated to mills.

Protection

The best method of preserving these features is to leave them *in-situ*.

Vegetation should be left undisturbed and not removed or 'pulled back' to define the feature.

Materials such as stones should not be thrown into the feature.

Further reading

www.english-heritage.org.uk/publications/iha-mills

For further information, please visit the Watershed Landscape Project website: www.watershedlandscape.co.uk/spotters-guide

Identification



Conduits

Stone-lined channels, often fed by small streams, which run from an upland location down to a reservoir. Sometimes identifiable on Ordnance Survey maps.

Water-powered mill

Often identified as the standing or partial remains of a rectangular structure set on a water source.

Reservoirs

19th century constructions, these may still hold water, or have long since dried up. Whilst remains are often easy to spot, confirmation of their origin can be seen on old maps and in local historical documents.

Temporary dams

Made of earth or stone, these features are sited across rivers or man-made channels. Evidence of renovation and reuse may be visible, demonstrating the dams intentional destruction or replacement after a flooding event. In many cases, little of temporary dams remain and they are best identified in association with a water course.

Water diversion features

Man-made channel leading away from a natural water source, sometimes with a small associated pond or holding area. Often the channel is wetter than the surrounding area and is favoured by rushes. Where the diversion takes the water below ground, brick or stone-lined culverts or tunnels may be seen.

Images

Top: Overgrown conduit, Thornton Moor

Left: Stream being taken below ground to ensure supply to a mill. Horsewood Tunnel, Gaddings Dam (copyright: Tim Challice)

Right: Water diversion feature, Todmorden Moor