Education File: YDNPA

Lead has been mined in the Dales since Roman times. It flourished between 1720 and 1880 reaching its peak in the 1850's. Parts of Swaledale, Arkengarthdale and Wharfedale were the main areas and the activity has left many locally important marks on the landscape: spoil heaps, shaft mounds, chimneys, flues, derelict buildings, hushes, dams, reservoirs, leats ... as well as a network of tracks and paths. These have been added to by coal mining and stone extraction.



Old Gang Smelt Mill. Swaledale - once an industrial landscape

Despite the major advances of this period, the basic agricultural, wood working and stone working tools of this time were very similar to those used by the Romans.

Expansion of the mining and textile industries increased the demand for housing and more buildings appeared on the outskirts of the villages. New building styles were introduced with the coming of the railways and the new materials they brought. Population decline following lead mining collapse led to dereliction and combining of many houses.

20TH CENTURY

Friesian cows appeared in the landscape replacing local breeds like the Craven Shorthorn during the 1940's, while the horse was commonly in use until the 1950's. Since the 1940's mechanisation and the intensification of dairy and beef farming has had a significant impact on the landscape while national policy has restricted rural building development significantly.

With the establishment of the National Park Authority in 1954 planning controls have increasingly restricted development and the spread of buildings in particular. This has meant that the majority of new housing for example has been limited to barn conversions, infilling on vacant plots within villages and construction of new houses for farmers and agricultural workers. It is striking that even with a resident population of around 20000 and 8.3 million visitor days spent in the park in 1994, signs of the urban 20th century in the Dales are relatively few.

THE FUTURE?

The natural beauty of the area is the central reason for its National Park designation. The conservation and enhancement of this natural beauty is one of the two main purposes of the Authority.

Scenery continues to be the most popular feature of the area among residents and the visiting public alike. It is the most frequently mentioned reason for visiting the park, chosen by 74% of people surveyed in 1994.

Yet the landscape of today remains a working landscape, over 95% is managed for broadly agricultural purposes. The natural beauty of the area continues to evolve with the expression of lifestyle in the landscape. Much of the landscape character that is so popular is a direct expression of thousands of years of use by our ancestors.

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Education File

Information for students and group leaders



Cultural heritage

lifestyle in the landscape

People have lived and worked in the area of the Yorkshire Dales for thousands of years. Their cumulative impact on the landscape has created today's cultural heritage.

While the landscape continues to respond to natural forces it is the expression of lifestyle which has brought about the major changes during recent times

13000 YEARS AGO

The most recent glaciation was coming to an end at about this time. The retreating ice left behind a landscape of bare rock and deposits of glacial drift - a mixture of clay, sand, pebbles and boulders. The depressions left by melted ice filled with water to form ponds and lakes.

Mosses and lichens colonised the bare ground, followed by grasses and herbs to create a tundra landscape similar to parts of Lapland today. Reindeer, great elk and horse grazed the tundra in the presence of wolf, arctic fox, and bear.

As the climate warmed the tundra vegetation was succeeded by heath and later by woodland, initially birch, pine and hazel with alder and willow on the wetter ground, and open grassland in the higher places. The ponds and lakes gradually filled with silts and sands from incoming streams, creating shallower water in which vegetation developed.

11000 YEARS AGO

It was into this scene that the first groups of nomadic hunters entered, armed with tools of stones and bones, worked and shaped for scraping, cutting and piercing. In addition to hunting they gathered seeds, roots, nuts and berries and ate birds and fish, all activities which had little impact on the landscape. Simple shelters like wooden windbreaks and tents, covered with animal hide, grass or bark, are unlikely to have left any traces of their existence.

A carved antler harpoon found in Victoria Cave near Settle thought to be about 11000 years old is the earliest and most reliable evidence of people in the area. Older bones of hyena, rhinoceros and hippopotamus, have been found in lower deposits in the same cave. Signs of earlier human presence are highly unlikely to have survived the 3 major glacial periods of the last half million years, during which even the highest peaks in the area were at times buried by ice.

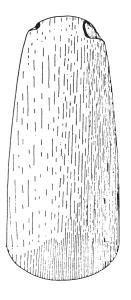
By about 8500 years ago average temperatures were about 2°C higher than those of today, and woodland probably covered 90% of the area.

8000 YEARS AGO

Lifestyles evolved gradually throughout the Mesolithic period, seasonal movement following migratory animals likely becoming less important as time progressed.

Large numbers of small flint and chert points and blades (microliths), many as small as 13mm long and 3mm wide have been found dating from this period. These were used as barbs on shafts of antler, bone or wood. Small clearings created by wind blow and lightning helped develop woodland edges. These attracted grazing animals which could be killed for food.

The marshes and moraine lakes in the valleys were silting up and slowly decreasing in size. Tree burning and clearing hastened this process, burnt organic debris and soil from bare ground adding to the sediment load of streams and run-off. Removing trees reduced water loss and added to the water logging of the soil so helping the formation of peat.



Polished stone axe (neolithic)



Bronze Age barbed and tanged arrowhead

Education File: YDNPA

5000 YEARS AGO

The Neolithic people introduced farming to the landscape and brought seed corn and domesticated cattle, sheep, goats and pigs. We do not know if they arrived as migrants from abroad or whether they were the existing population adopting new techniques. They used leaf shaped arrowheads, antler combs and pottery. Their polished axes of flint or hard volcanic rock allowed more sustained tree clearance and created more land for cultivation.

Few traces of their sedentary lifestyle are likely to have survived other than occupation debris such as hearths and animal bones, pottery, flints and stake holes for tents. Growing agricultural activity and woodland removal increased soil erosion exposing more stones to clear to ease the harvesting of grass and arable crops. Many clearance cairns were created at this time, some of them simply low lines of stones thrown out of the way, possibly the beginnings of early walls. Activities such as henge building suggest a social stability, probably revolving around the farming economy, allowing for nonproductive work over longer periods.

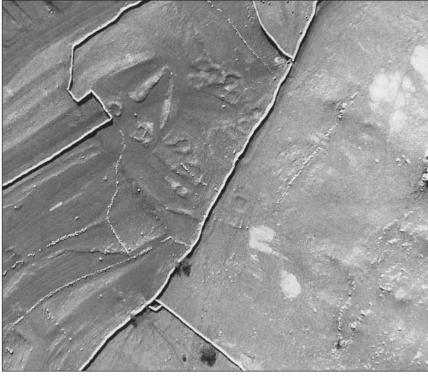
3500 YEARS AGO

During the early Bronze Age, the collective inhumation burials and cremations of Neolithic times gave way to single burials crouched in pits or beneath barrows of earth and turf or cairns made of piles of stones.

Climatic conditions deteriorated around 1000 BC. An average temperature drop of around 2°C probably shortened the growing season by about 5 weeks and lowered the crop ripening altitude by as much as 150m. Increased competition for growing space probably led to tribal groupings, in small farming communities, banded together under the protection of a warrior elite. This may explain the building of hill forts at this time to provide refuge during sudden raids by neighbouring groups.

2500 YEARS AGO

Iron Age people, the Brigantes (Celts) further developed hill farms and small settlements surrounded by fields on the better soils of the lower hill sides. They lived in round houses often made from stone bases with a steep heather or turf thatch over a wooden frame. They ate oats, rye, wheat, barley and beans grown in fields marked by stone banks and hedges with cattle, sheep, goats and pigs corralled in adjacent yards.



Gordale: Iron Age/Romano-British settlement showing hut circles, partially surrounded by later lynchets

As arable farming expanded on the lower valley sides the remaining thin woodland of the steeper slopes was grazed by sheep and cattle, increasing the amounts of open pasture and scattered scrub. The wetter colder climate increased peat and heather moorland formation and the bogs and heaths established at this time were probably similar in extent to those of today.

It is reasonably certain that by about 100 BC, small amounts of woodland and the high moors were the only land remaining in the natural state.

The lack of controlled excavation work on archeological sites from throughout these times makes it very difficult to give accurate dates. Added to this many sites were probably occupied over long periods which spanned gradually evolving cultures and technologies.

70 AD

The Romans arrived in the Dales to find an open landscape, with perhaps more woodland in the gills and marshier valley bottoms than today and a people producing enough to supply their immediate needs. With the Romans came a more intensified agriculture and a period of economic stability and prosperity, all of this necessary to maintain large numbers of troops in the area. They added forts, marching camps and roads to the Dales landscape and villas on better ground close by. There have been many finds

of coins, pottery and jewellery in the Dales, suggesting that the native population appreciated the trappings of Roman civilisation.

410 AD

The departure of the Romans left the Britons organising themselves into tribal groupings and kingdoms. A gradual decline in climatic conditions increased crop failures and famine along with disease. This caused the population to fall and distribution patterns to change.

600 AD

The native British population was gradually supplanted by Anglian and Saxon invaders and migrants. The population continued to fall. This probably caused an increase in pastoralism and a shift away from labour intensive arable agriculture, particularly on the higher ground.

865 AD

Norse peoples arrived from the east from Scandinavia and via Ireland from the west. They farmed cattle and sheep in isolated settlements in remote Dales. By about 1000 AD the agriculture of the area was dominated by small farmsteads on the valley sides, partly surrounded by meadows. Some had ploughed fields on the gentler slopes, with pasture on the steeper ground and rough grazing on the higher slopes and hill tops.

1066 AD

The Normans designated forests with legal status as hunting areas to manage game, which included fallow, red and roe deer and wild boar. Forests included both open land for the hunt and wooded areas for shelter and feeding.

They established the feudal system along with castles and monasteries. The Norman conquest resulted in a dramatic change in land ownership. The Domesday Book of 1086 - 88, records land owners and their estates for the first time, along with details of pre-conquest ownership.

The Normans developed the political structure of the area considerably, based on the previously established Ridings of Yorkshire and Wapentakes, groupings of townships. The significance of parishes grew with the growth of the church.

Much of the present day settlement pattern probably has its origins in this medieval period. Nearly all Dales villages are of agricultural origin, with tofts - house, outbuildings, garden, yards, small enclosures belonging to one family - being the home bases of self supporting farming communities. Regular village greens and back lanes are often signs of villages 'planned' at this time. Market towns developed on the fringes of the Dales.

1300AD

Strip farming reached a peak by about 1300 AD and began to decline in the 14th century. It enabled land of varying quality to be distributed fairly among tenants of a township, with farmers being well placed to manage strips spread across the area. Communal cooperation was of great importance with fields and pastures grazed by animals of every farmer. Oats, wheat, barley, rye, and beans were the main crops, while butter production was well established and ewes were milked to make cheese. Manure was spread on the land and over wintering animals were fed on hay and leaves.

The remains of arable fields of medieval times can be found throughout the Dales. Lynchets dominate on the steeper slopes running parallel with the contours and forming broad terraces. Ridge and furrow was created by a single furrow plough drawn by oxen or horses going up one side of the strip and down the other, creating the ridge by constantly turning the sod towards the centre.



East Witton: a 'planned village' with a rectangular green flanked by rows of 'tofts and crofts' leading off

Land was gradually given to monasteries in return for "prayers for the souls" of land owners. Upland sheep ranches were created, Fountains Abbey had a flock of almost 15000 sheep by the end of the 13th century. Hunting areas diminished as monastic estates and settlements grew. The richest landowners created enclosed deer parks for hunting, complex fish ponds to supply fresh fish and artificial warrens for rabbits.

Networks of roads and trackways developed linking the monastic granges with their parent houses, and allowing for large movements of stock, Mastiles Lane being one of the best known examples.

1600 AD

Most houses were dwellings of single room width made from wood and clay with a heather thatch, or a dry stone wall base in the case of the wealthy. The 17th century saw an increase in stone used for buildings and the introduction of lime mortar. These dwellings developed into the classic Dales buildings with mullioned windows, some with animal byres at one or both ends.

Piecemeal enclosure connected with earlier woodland clearance and private exchange and purchase of strips had produced a network of small stone walled and hedged enclosures surrounding most settlements by the 18th century.

1750 - 1850

Education File: YDNPA

This was a period of many agricultural improvements with much existing practice applied with renewed vigour including burning old vegetation, draining and liming of newly enclosed rough pasture. With the Industrial Revolution came the end of self sufficiency and the decline of arable crops giving way to sheep and cattle. Improvements in guns during the mid 18th century helped develop the shooting of grouse for sport and eventually the management of moors for grouse.

The parliamentary enclosure of the common grazing grounds extinguished common rights in return for individual rights to allotments. This greatly increased the total length of dry stone walls (In 1988 8000km of walls, 1000km of hedges and 250km of fences existed in the Dales.)

Between 5 and 6 thousand field barns have been recorded in the Dales. The earliest surviving have 17th century date stones; most were built between 1750 and 1850. Almost 880 field lime kilns were mapped in the Park in the 1850's. Field barns were a sophisticated response to over wintering stock in the harsh environment. The system revolved around grassland management. In the meadows grass was allowed to grow to seed, then cut in July and left to dry. The hay was stored in barns and used to feed stock during the Winter. The cattle grazed upland pastures during Summer and were housed in the barns between November and May.



Downholme: lead workings, a limestone quarry and medieval lynchets and ridge and furrow.