

Introduction

There are walking guides and there are cycling guides. For the pilot, flying guides are usually limited to a host of airfield information and frequencies. This guide is meant to be something a little different; a guide to what there is to see while you are out and about.

I suspect the most common flight by recreational pilots is the classic one hour bimbble. But finding things of interest to oneself, friends, and family within an hour or so flying time gradually becomes more difficult.

I have always enjoyed making local trips as, from the air, there is something quite different to be seen in the landscape, geography and history of an area. I have, like all pilots do, developed a number of favourite routes for either flying friends or for just pottering about to see what is happening.

The idea for the guide came about from conversations with flyers who have an aeroplane booked, perfect weather, and no particular place to go. What was needed were suggestions for trips and things to look for on the way. Things that were obvious, things that needed explaining, and some frankly tricky teasers. From this came the idea for a guide based on some of my favourite trips from Sherburn in Elmet airfield in Yorkshire.

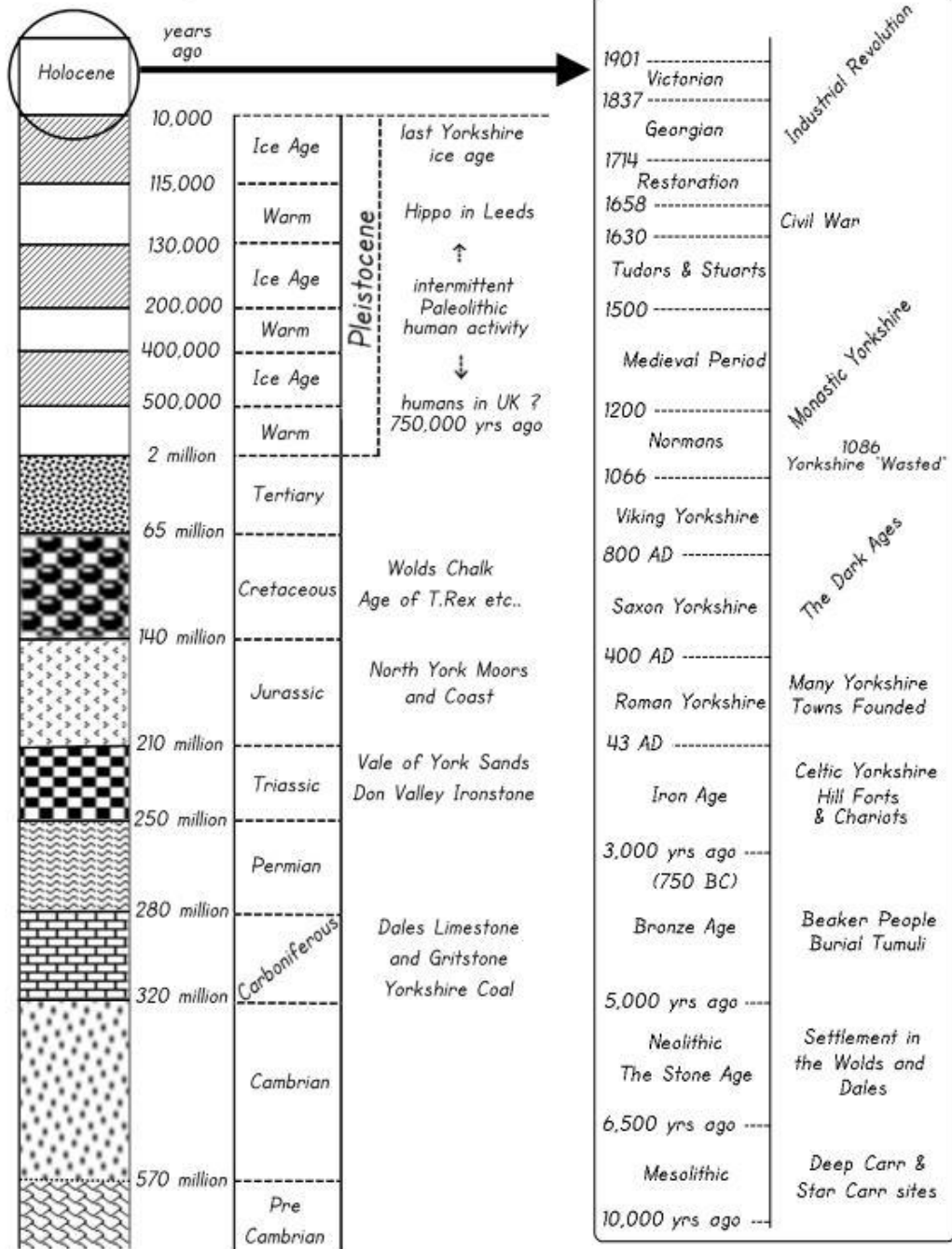
For each trip, the simple sketch map shows what there is to see and the text describes some interesting things about the trip. Rather than random flights these flights generally have loose themes. Some of the flights will be well known to pilots based at Sherburn but I hope some will, at least, have new things to offer. What I have identified reflects my own interests and knowledge - these being the kinds of things that I tend to notice. I am sure there is much more out there.

The sketch maps are just that, I need not say more about navigating by them. I have included the heading in degrees true and the distance in nautical miles for each leg, but the map is stretched and reshaped to allow for the annotations. The route information supplied should at least give a good indicator. There are no airspace boundaries or frequencies on the maps.

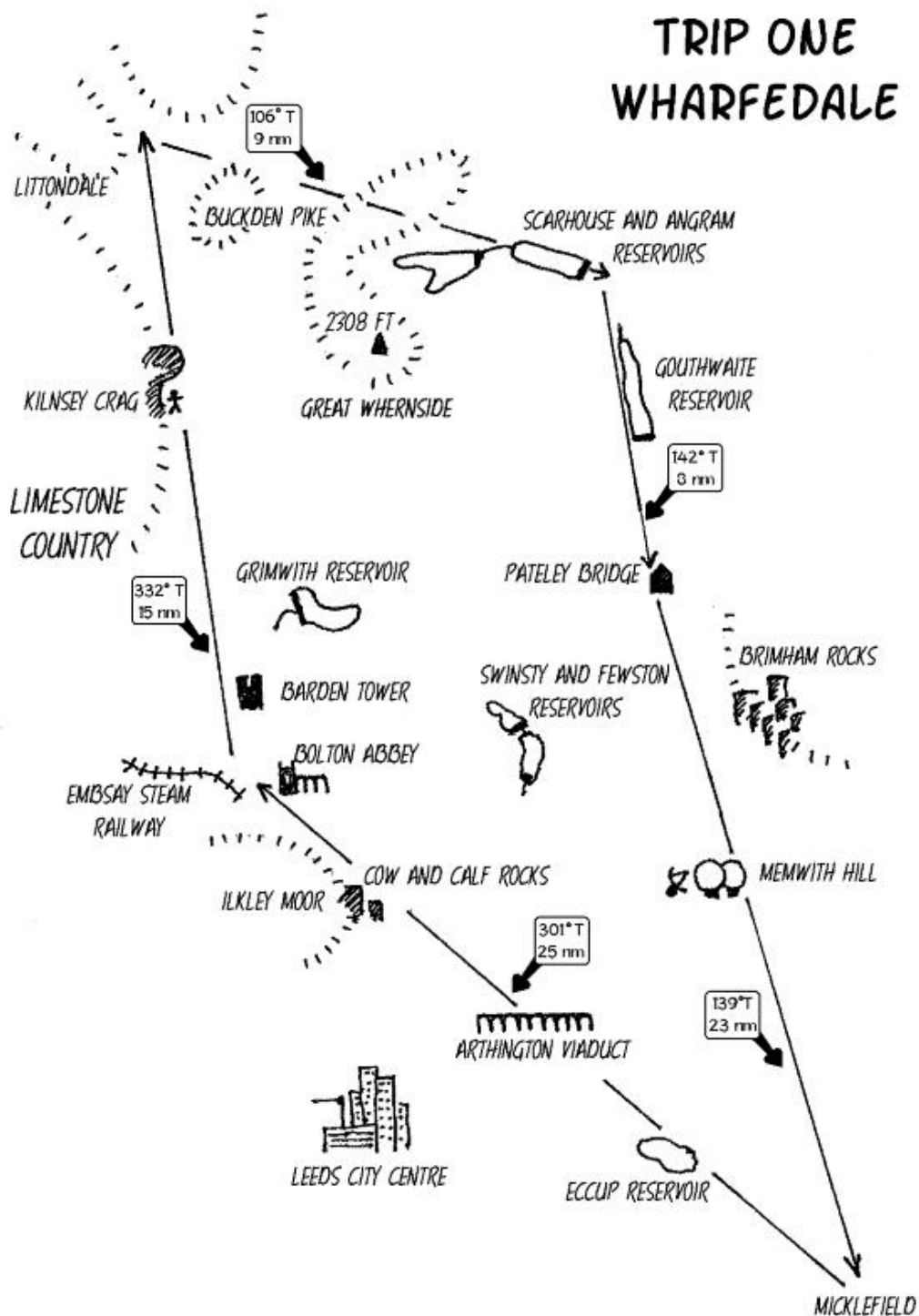
Flying from Sherburn has noise routings. For that reason I have started each route from one of a number of common start points away from the airfield.

Richard Maxted (2008)

A YORKSHIRE TIMELINE



TRIP ONE WHARFEDALE



Trip One : Wharfedale

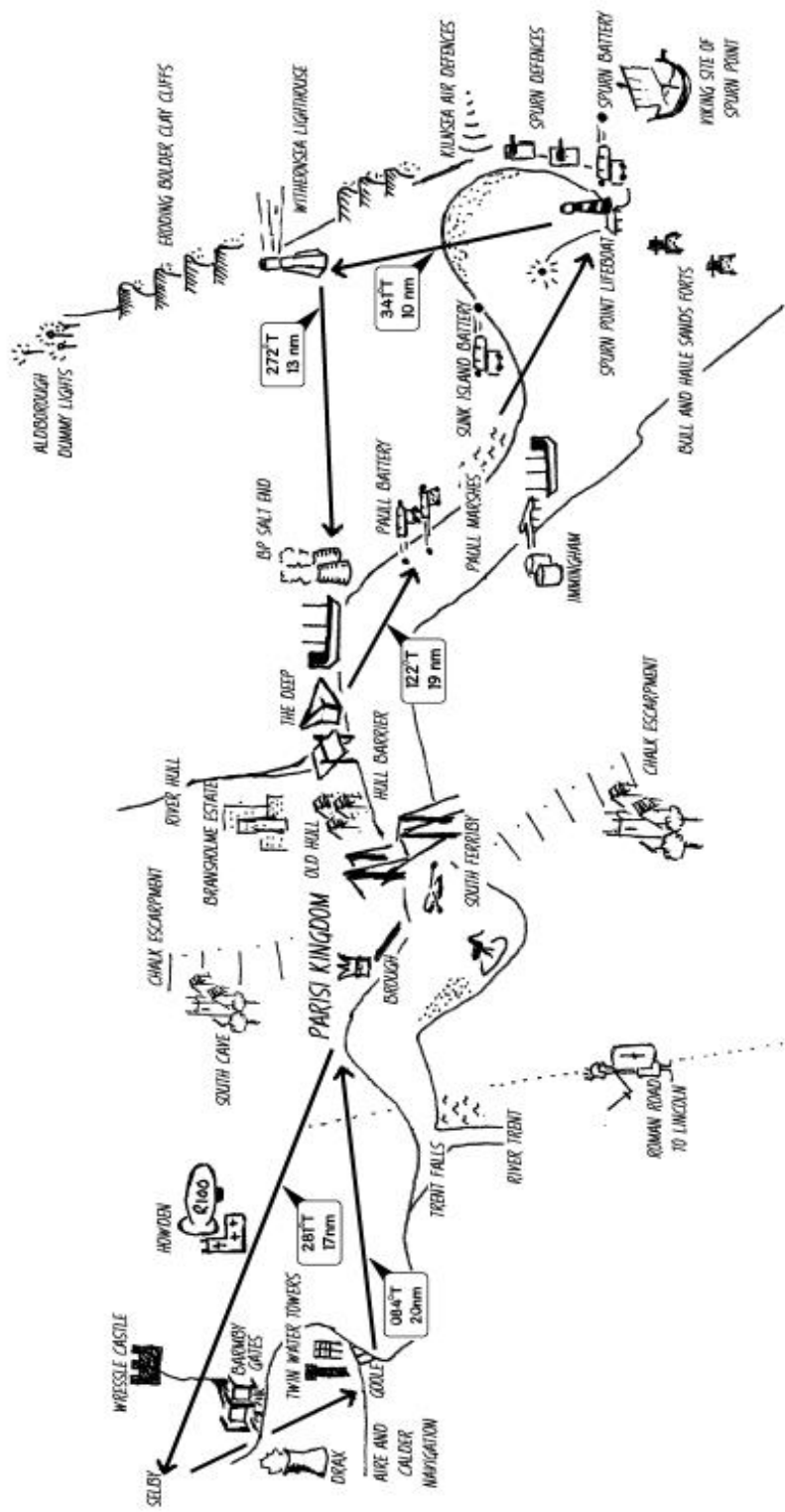
Wharfedale, and its sister Nidderdale, are an introduction to the Yorkshire Dales in many respects. To see it at its best is to take a late afternoon flight when the shadows throw everything into relief. The dales are made up of limestone and millstone grit. Above Bolton Abbey the limestone provides spectacular cliffs and screes such as at Kilnsey. To the east and south the millstone grit provides the moors and outcrops such as Brimham and Ilkley as well as the expanse of the Nidderdale plateau to the east of Pateley Bridge. Through this runs the River Wharfe in a classic **U** shaped valley formed by the last ice age some 15,000 years ago. At Kilnsey the glacier cut through a spur of land to leave an overhang and in Liddondale the valley sides were cut steep by the glacier.

Wharfedale changes from the wide valley floor around Arthington, that required such a spectacular feat of Victorian engineering to carry the railway from Leeds to Harrogate, to the tightly closed valleys and hills at Buckden. Wharfedale is not just pretty, the hills are full of the reservoirs which supply drinking water for Yorkshire. The Wharfe itself forms part of a complex web which links all the reservoirs of Yorkshire allowing water to move anywhere. Reservoir building has gone on for most of the last century with the outlines of the 1920's workman's village still clearly visible alongside Scarhouse Dam. But besides water supply the reservoirs are also nature reserves, in the summer the north end of Gouthwaite Reservoir is kept at precisely the right level for wading birds.

The remains of old mine workings are clearly visible in the Great Whernside area and in Nidderdale near Pateley Bridge, At Grassington there are remains of old silver mines. Around Wharfedale the hill tops are littered with terrace fields of abandoned medieval farms whose outlines still clearly visible. There is evidence for a 1000 years of farming at Brimham Rocks. The Saxons moved into the dale in the 6th century before which this area was part of the kingdom of Craven, whose defence wall can still be seen near Buckden Pike. They were followed by Vikings in the 10th century and the land to the north of Buckden Pike was a Norman hunting forest. Barden Tower was a hunting lodge for the ancient forest of Barden, one of the huge Norman hunting forests that filled in the gaps between the land owned by monastic estates. Bolton Abbey was started in 1154 as an Augustinian abbey and lasted until Henry VIII and the dissolution of the monasteries in 1539. It's still a parish church; although parts of it ended up as far away as the farm at Brimham Rocks.

Tourism is the big draw these days, The Wharfe and Nidd valleys contain some of the hardest rock climbing in the world. There is the steam railway at Embsay and sailing on Grimwith. The walks up Whernside, Buckden Pike and the many other parts of the valley gives a spectacular view whilst the river gorge called "The Strid" at Bolton Abbey provides a grand day out.

TRIP TWO HUMBER AND SPURN



Trip Two: Humber and Spurn

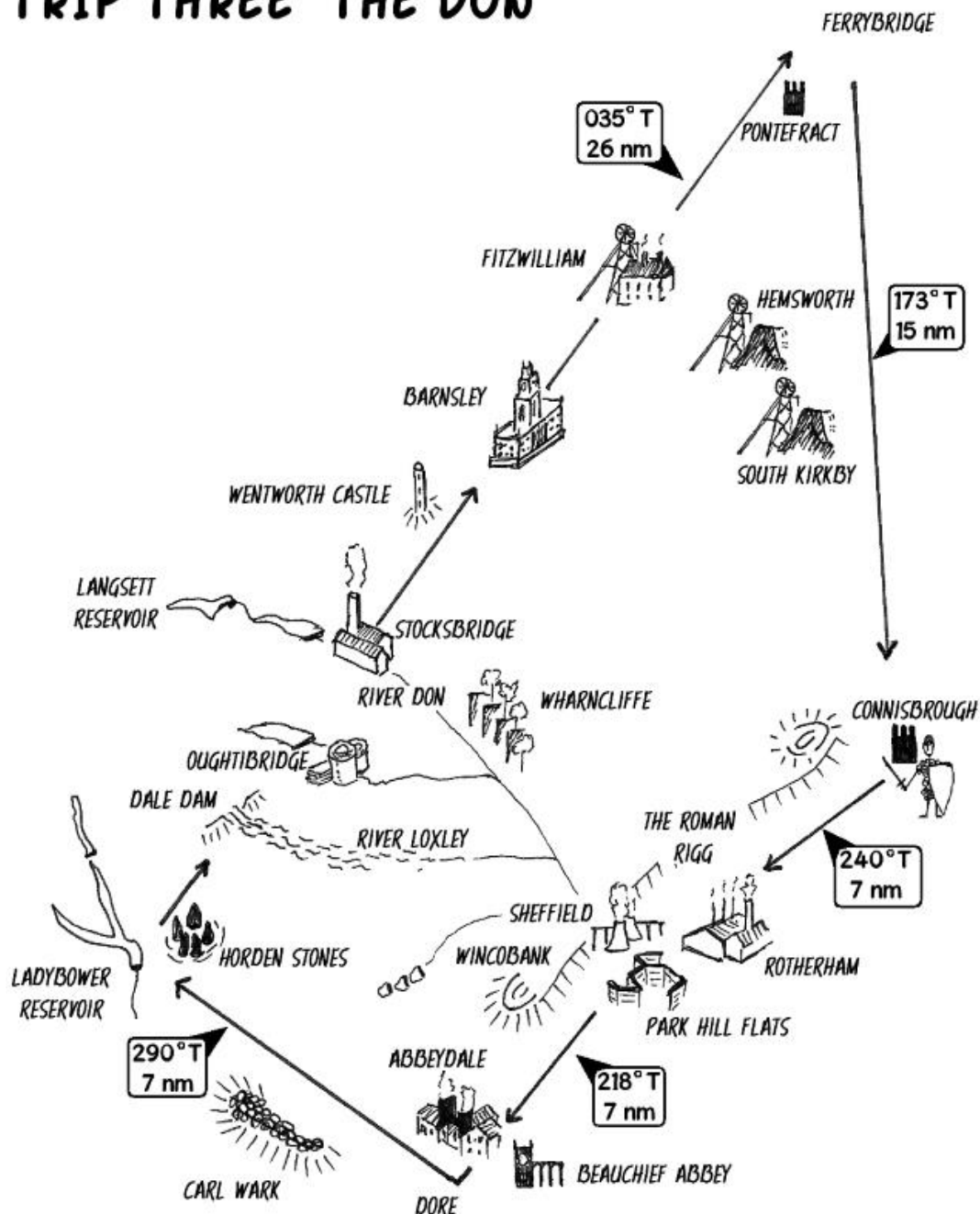
The Humber drains 20% of England, 246 tonnes of fresh water enter the 45 mile long estuary every second moving three million tons of silt in every tide. It was formed by melting glaciers 20,000 years ago and changes in sea levels up to the present day. Spurn Point is always moving as the cliffs to the north supply material; in Viking times Spurn was some 5 miles further east. Sea level changes caused Sunk Island to rise out of the sea in the 13th century and the RSPB reserve at Reed Island started as a sandbank. This 145 square miles of shifting sands, fast currents, and treacherous shallows needs complex sea defences, such as the Hull Barrier and the Barmby Barrage.

The Humber has long been a trade route, three boats dating back to 2030 BC were found at South Ferriby. On Roman maps of the world Brough is shown as the capital of the Celtic Parisi tribe. The chalk escarpment has a number of villages which, like South Cave, are formed on springs - an important facet of Celtic religion. In AD70 Brough was the crossing of Ermine Street, the Roman road from Lincoln. Spurn was named Hrafnseyrr by the Vikings and saw the last Viking army leave England after the battle of Stamford Bridge in 1066, the arrival of the future King Henry IV in 1399, and the mystical hermit Wilgil in the 7th century. Ravenser Odd, now drowned some 4 miles out to sea, was the great northern port of England in 1235 but it was destroyed by a great storm in 1362. By 1508 Kyngston-super-Hull was an important Tudor port. However, it was not until the railway in the 1890s that Hull really expanded. Similarly, Goole was built in 1826 by the canal company who needed a port. In contrast, Howden is now a sleepy village, but was where King Edgar of the Saxons launched the conquest of the kingdom of Elmet in 959 AD.

Defending the Humber has always been vital. The batteries at Paull, which had 19 guns by 1892, replaced a defensive fort called the Citadel in the location of The Deep today. During WWI these defences were strengthened with the Sunk Island battery, the forts at Bull and Haile Sands, the Spurn fort, and the Kilnsea and Godwin defences. In WW2 the radar site at Sunk Island and a decoy version of Hull at Aldborough were added to the already extensive defences. Blackburns built military aircraft at Brough and the later R100 airship was built at R.N.A.S Howden.

The Humber is still an industrial estuary. There are 40,000 shipping movements a year, a quarter of the UK natural gas and petroleum imports, and the BP plant at Salt End. Although Withernsea and Spurn Lighthouses are disused shipping continues to be uniquely guarded with the only full time life boat crew at Spurn, and the resident Humber pilots. The economic importance is reflected in the Humber Bridge, a huge project of 1.5km span weighing half a million tonnes and requiring 71 km of wires to hold it up.

TRIP THREE THE DON



Trip Three : The Don

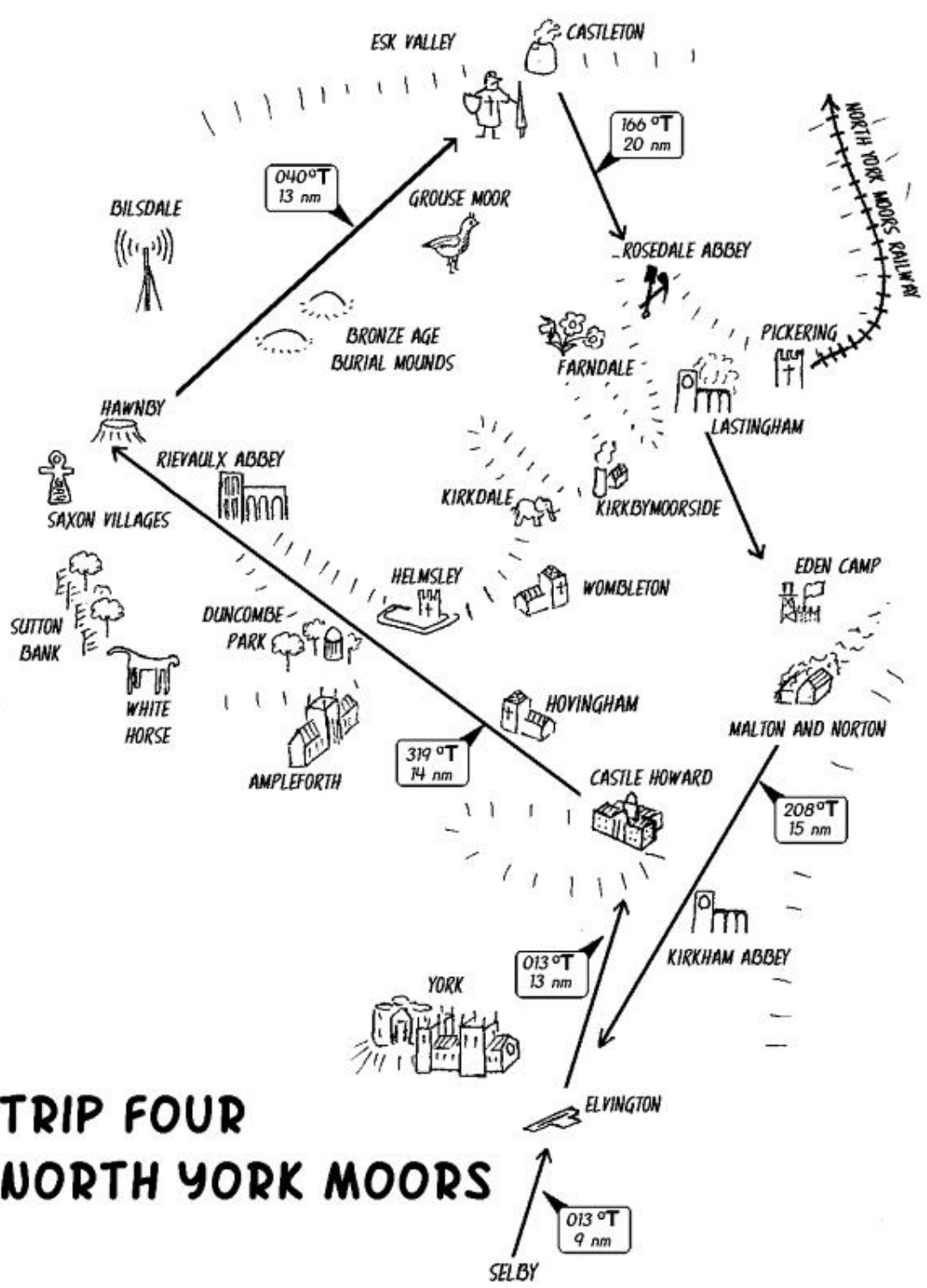
With limestone to the east, a central coal belt, and iron ore bearing sandstones to the south the Don valley is industrial Yorkshire. People have always worked here. The standing Horden Stones are one of the many prehistoric sites on the moors, like the mesolithic camp from 7000BC at Deepcar near Stocksbridge and the prehistoric flint and grain stone manufacturing found at Wharnccliffe. The iron age forts at Wincobank and Carl Wark overlie earlier bronze age settlements, whilst Rotherham is a Celtic settlement. Castleford and Templebrough are Roman towns. The Roman Rigg is a long bank that is likely to have been a Brigantine defence against the Romans.

It was the Normans who organised things. William the Conqueror arrived in Castleford in 1067 and then slaughtered the Anglo-Saxons in York. The harrowing of the north left Penistone recorded as “wasted” in the 1086 Domesday Book. Norman dominance required castles such as Pontefract, built in 1080, where Richard II was starved to death. Conisbrough, built in 1070 as the centre of Norman Yorkshire was no accidental location as Cyningsburgh had been an Anglo-Saxon castle. In 1160 the monks of Beauchief and Malby Roche abbeys had four forges at Wharnccliffe and, by 1491, a coal pit at Silkstone near Wentworth. The coal of the Hemsworth area began to be exploited by the Tudor period with mines at South Kirkby.

In 1740 Huntsman invented a hardened steel, used at the Abbeydale scythe works. But it was steam power that revolutionised South Yorkshire. There was huge expansion - coal mines in the south Kirkby and Hemsworth area, iron and brass foundries using the Bessemer process in Rotherham. There were 400 steam looms at Barnsley, wire making at Stocksbridge, and paper mills at Oughtibridge. The resulting population explosion, Barnsley grew from 3,600 in 1801 to 10,000 by 1831, caused the development of new settlements such as the colliery model village at Fitzwilliam known as “the City”. There was a massive demand for water, Dale reservoir on the River Loxley was nearly complete in 1864 when the dam burst. 650 million gallons of water swept into Sheffield washing away Damflask village and destroying iron forges in Sheffield where some 250 were killed. By the early 20th century most of the headwaters of the River Don had been dammed, plans were made for Ladybower Reservoir, and Barnsley had finally acquired a town hall !

December 1940 saw 78,000 homes destroyed in Sheffield and led to the post-war reconstruction such as Park Hills Flats, but the decline in coal and steel had begun and most of the heavy industries of South Yorkshire were gone by the late 20th century. However, there are still mills at Oughtibridge, wire making at Stocksbridge and iron foundries in Sheffield. The long historical legacy continues.

TRIP FOUR NORTH YORK MOORS



Trip Four: North York Moors

The Jurassic ironstone and limestone gives the North York Moors its characteristic steep valleys and flat tops. 10,000 years ago, at the end of the ice age, there were rhino, hippo, and elephant whose bones have been found at Kirkdale. Because melt water couldn't escape to the sea it carved through the Hole of Hocum to join a huge lake that filled the Vale of Pickering. At Kirkham Abbey the steep gorge was formed as the lake water burst out and washed down to the Humber.

Settlement concentrated on the limestone, although on the tops there are the bronze age burial mounds of the Beaker People dating back to 2000 BC. Pickering is a Celtic settlement, Malton was a Roman town. To the west of Hawnby all the village names are Saxon. St Gregory's Minster at Kirkdale contains Saxon artefacts, and the numbers of churches and crosses suggest it was an important centre for Saxon Christianity. With invasion came destruction, Lastingham Abbey was destroyed by the Vikings, and the monks that followed the Norman "wasting" of the north found ample land.

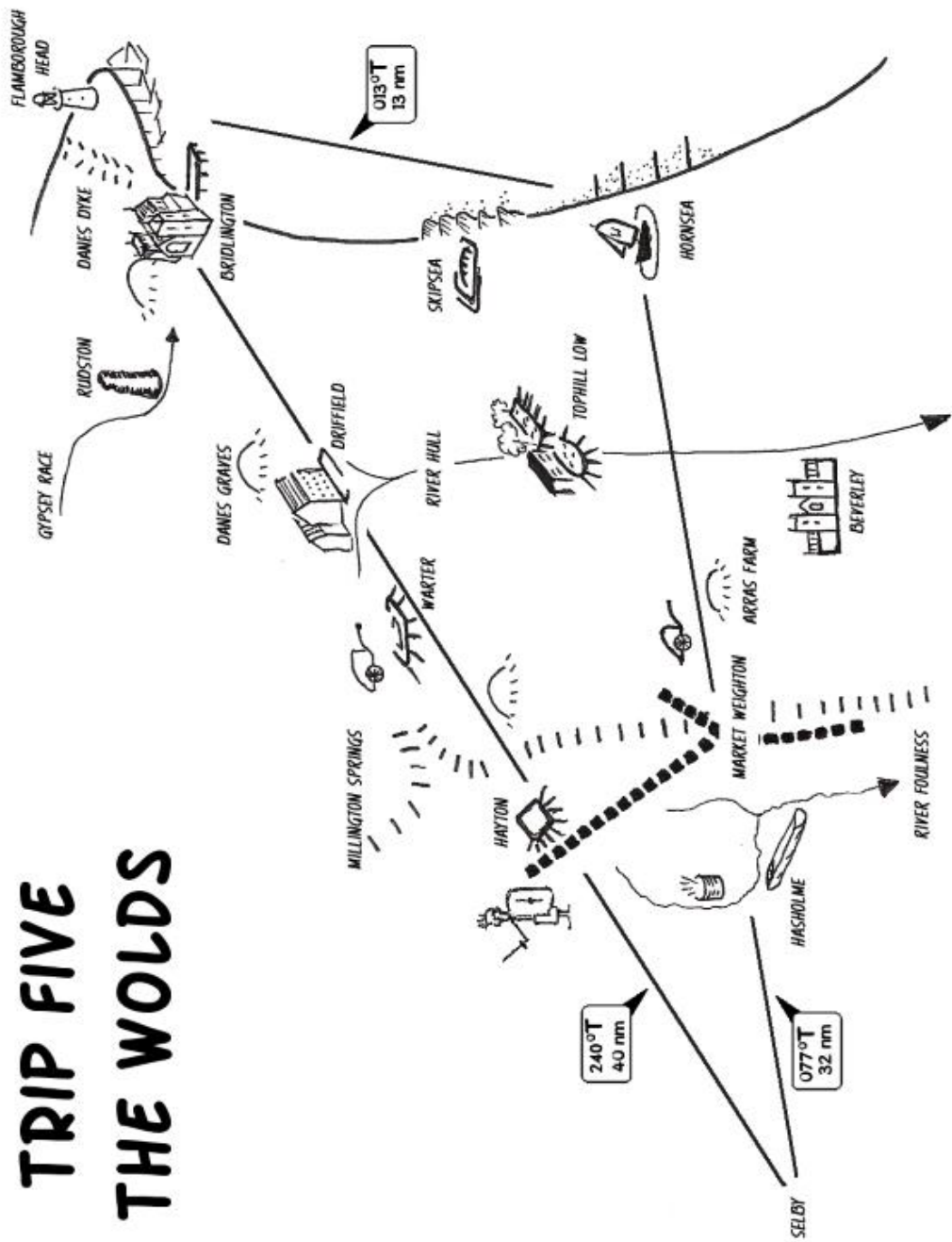
Rievaulx Abbey was founded in 1132. The Cistercian monks were skilled metal workers and had many iron and lead mines such as Westerdale near Castleton. This was a period of building with Kirkham Priory, Rosedale Abbey, Ampleforth Abbey, and Byland Abbey all being started between 1120 and 1170. Helmsley and Pickering castles were started in the early 1100's with stone battlements being added in the 13th century. However, rural contentment was continually under threat. Malton was burnt down in 1138 to flush out Scottish troops. The black death and the Scottish raids finished Rievaulx as an important monastery, and Lastingham was finally abandoned after a Scottish raid. The Civil War saw Helmsley besieged by Royalists for three months and, although Fairfax eventually recovered Yorkshire for the Parliament, Helmsley Castle was left a ruin. Fairfax retired to Helmsley, his daughter being married to Charles Villiers, a notorious rake and favourite of Charles II, who died at Kirkbymoorside.

The next flourish of building occurred in the 1700's. Castle Howard - 1712, Duncombe Park - 1713, Hovingham Hall - 1770, all attest to the growing wealth brought about by a combination of rich agriculture and iron industry. In the 19th century the rich iron ores of the Esk valley required a railway. There were iron works at Kirkbymoorside and, although Rosedale remained a mining area until the 1920's, the Moors were no longer an industrial area by the mid 1900's.

Today the North York Moors are mainly used for agriculture, sheep and the grouse. The mining has gone, replaced by tourism; such as at Castle Howard, the WW2 Italian POW Eden Camp, the North York Moors Steam Railway, and the famous Farndale daffodil season.

TRIP FIVE

THE WOLDS



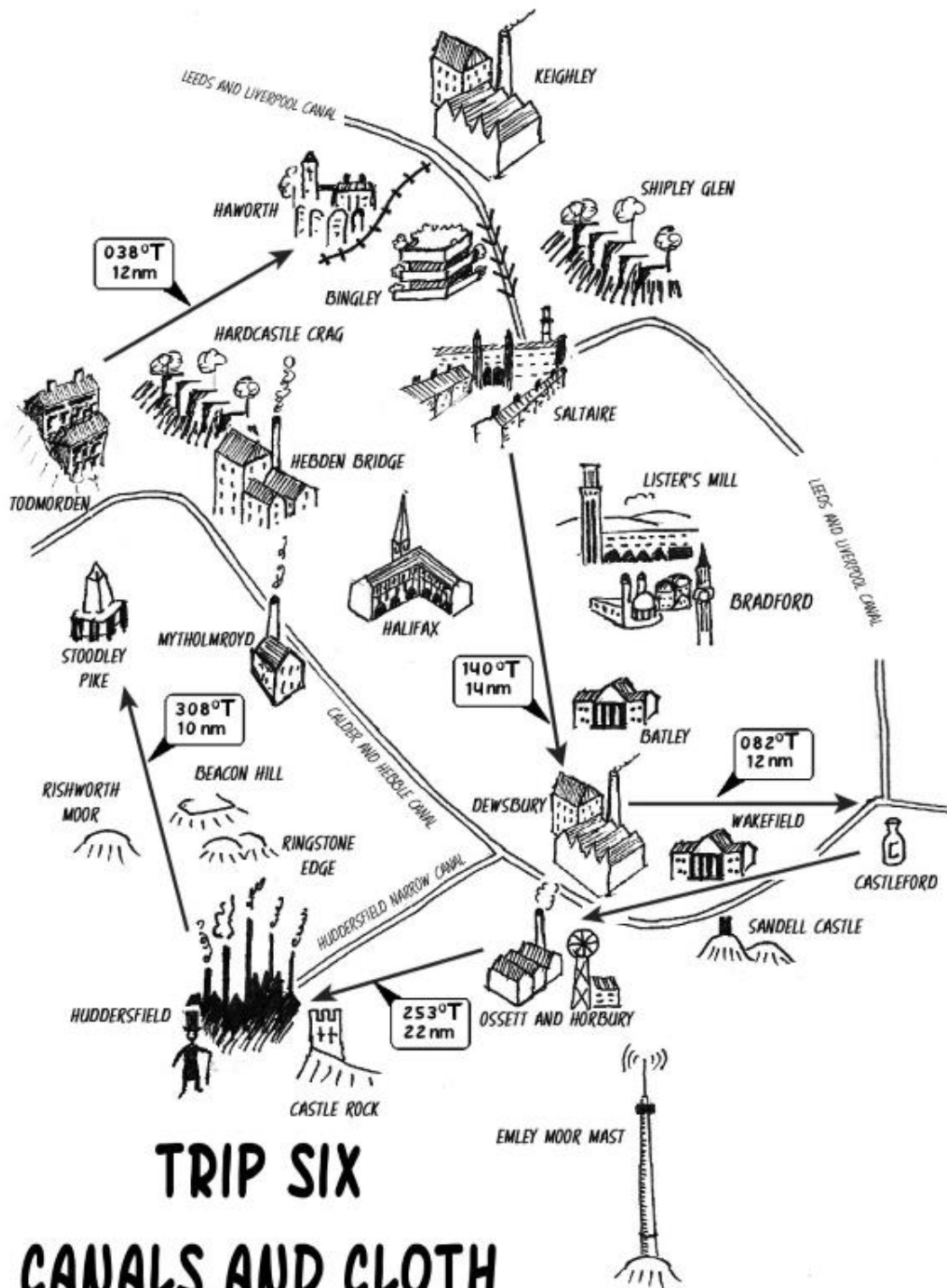
Trip Five: The Wolds

The Yorkshire Wolds are the most northerly chalk hills in the UK. Although formed in the Cretaceous Period, the age of the great dinosaurs, their shape is largely due to glaciation 10,000 years ago. The steep valleys like Millington are the result of melt water erosion. To the east the chalk forms a bowl which is lined with the clays left by the glaciers. Hornsea Mere is a post glacial lake and glacial clays form the fast eroding cliffs between Hornsea and Skipsea, where as much as four feet per year is lost to the sea.

The Wolds contain some of the best examples of early British activity, having been inhabited since the Neolithic 6,500 years ago. The Rudston area has many Neolithic burrows and burial sites. The Rudston monolith is the tallest standing stone in the UK at 28' high. During the iron age, the whole valley of the River Foulness was a vast inland creek stretching as far as Millington, at Hasholme a 12m boat dating from 277BC was discovered. Bursea and Hasholme were a centre of iron making. The wealth this produced is shown by the unique burials that included chariots, first discovered at Arras Farm near Market Weighton. Chariot burials have also been discovered near Driffield, Warter and across the Wolds. At Driffield there were as many as 500 burial sites at Danes Graves. Danes Dyke on Flamborough Head is likely to be an iron age structure perhaps reused by the Vikings later. Most Celtic sites are near springs such as the iron age fort at Dearsden near Warter.

The Roman road from Brough divided at Market Weighton going toward York and to the harbour near Bridlington then called Praesidium. The Roman fort at Hayton is one of many where the Romans just used existing Celtic settlements. The Vikings left little evidence other than place names like Skipsea and Hornsea. The Normans brought monasteries and castles like that at Skipsea. Beverley Minster was constructed in 1220 around the tomb of the earlier Saxon St John of Beverley who died in 721. By 1377 Beverley was one of the most important towns in England. Bridlington Priory, started in 1113, controlled the harbour and the medieval settlements along the Driffield to Bridlington road and in the Great Wold Valley of the Gypsy Race. The beacon tower at Flamborough Head, built in 1674, was replaced by the lighthouse in 1806. The growing importance of the coastal towns and especially Bridlington harbour, meant that lifeboats were stationed at Flamborough North Landing.

The Driffield navigation was constructed in 1760 to transport grain hence the large grain stores still seen in Driffield. The Tophill Low water works were constructed on the River Hull in 1959 to supply water for Hull. Tourism flourishes in Hornsea and Bridlington, the holiday resorts, sailing on Hornsea Mere and the impressive coast around Flamborough. But for most of the Wolds life continues to remain agricultural, as it has done since Neolithic times.



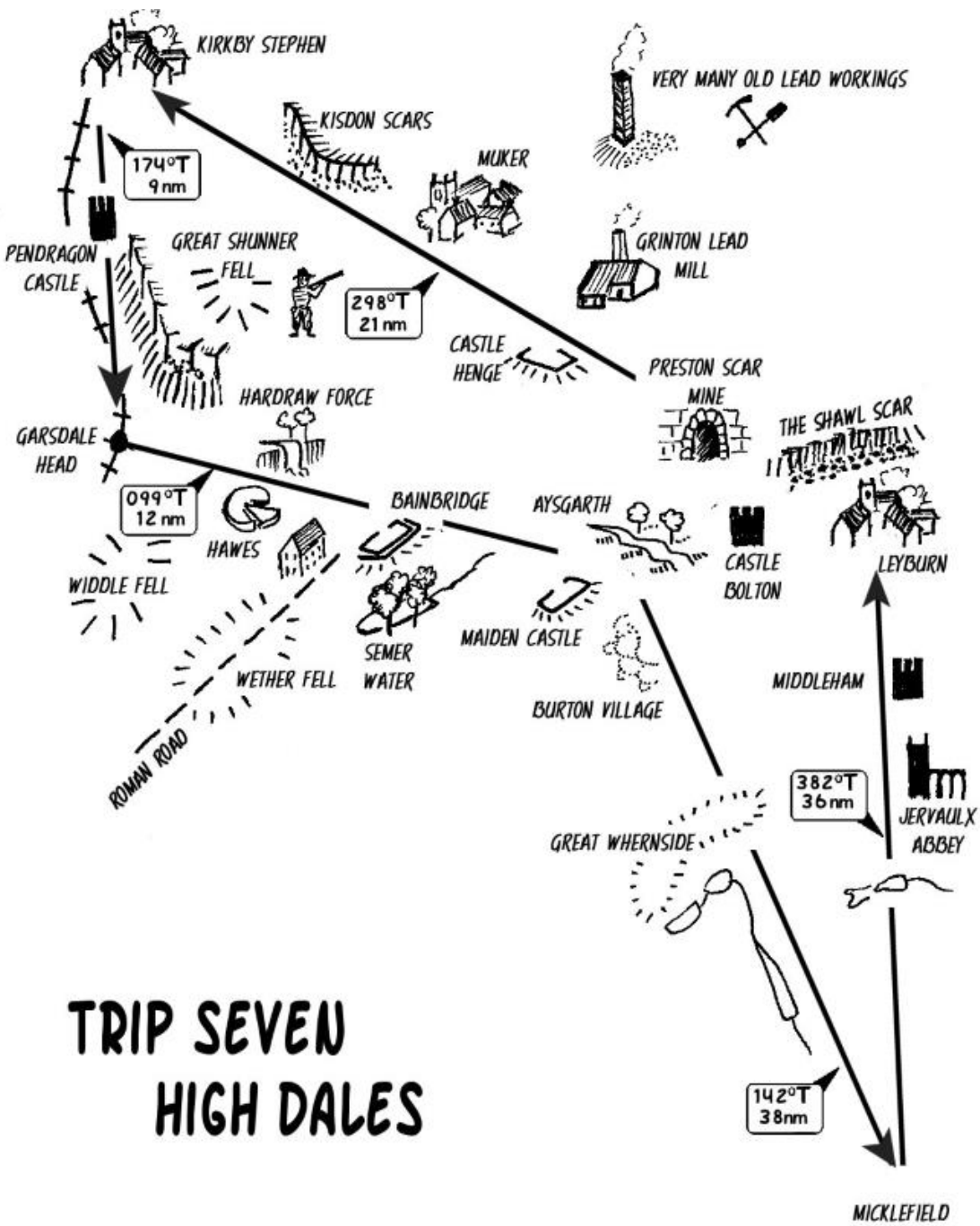
Trip Six: Canals and Cloth

Although Bronte's were inspired by the desolate moors of peat and Millstone Grit around Haworth this is really a long settled landscape. The Celtic fort at Castle Hill in Huddersfield, the Roman roads at Blackstone Edge near Ripponden, the 79AD fort at Castleford are found alongside the Bronze Age hilltop forts of Ringstone, Beacon Hill and Risworth and the older Neolithic settlements in the Spen valley. Bradford, Dewsbury, Batley and Bingley are later Saxon settlements. By 1106 Sandell Castle presided over a growing medieval woollen trade so valuable that local justice, as at the Halifax Moot Hall, meant that theft of cloth resulted in the gibbet; a primitive guillotine. By 1305 Keighley had a market charter and the Spen valley of Batley and Dewsbury had become the heart of the English woollen trade.

Halifax Piece Hall, built in 1779, was a market for hand loom cloth. The unique houses in Todmorden and Hebden Bridge with long upper storey windows allowed light for the hand loom weavers. The first dawning of industrial revolution began with the coming of the Leeds - Liverpool canal in 1774, the first steam powered mills at Cleckheaton (1795) and Gibson's cotton mill near Hardcastle Craggs (1800), The Calder valley canals opened in 1811 enabling cotton to be brought across the Pennines and by 1815 there were cotton mills in Halifax and the Calder valley. The canal itself was not without problems, in 1810 Diggle Moor dam broke killing five. In the Spen valley there were 32 coal mines. Dewsbury, Osset and Horbury were coal mining villages, and Batley had 30 shoddy mills - shoddy being a blanket material made from recycled wool. The Aire valley towns of Haworth, Keighley and Bradford specialised in worsted; in Keighley the 30 worsted mills produced a tenth of the UK output. Around Huddersfield a chemical industry grew to support the wool industry.

It is Bradford that tells the story best. Between 1800 and 1850 the population grew by 100,000. Listers Mill employed 7000, by the late 1800's there were 200 factory chimneys making 60% of UK wool production. Titus Salt built the mill and village at Saltaire, cornered the market in Alpaca wool, introduced the shorter ten hour day, used child labour, and died having given away his entire fortune. Civic pride and vast wealth produced the extravagant town hall in 1847, Italianate mills like Lister's and Salt's, the domes and spires of Moorish buildings such as the 1913 Alhambra Theatre. The huge population and short holidays required nearby entertainments such as the tramway at Shipley Glen, and Listers Park in Bradford. But even by 1900 the wool trade was uneconomic and subsidised by government.

By the 1970's the wool trade had virtually collapsed but had begun to be replaced by tourism and new industry. However, this is still a economically troubled area, never quite recovered from its extraordinary 50 year boom.



TRIP SEVEN HIGH DALES

Trip Seven: High Dales

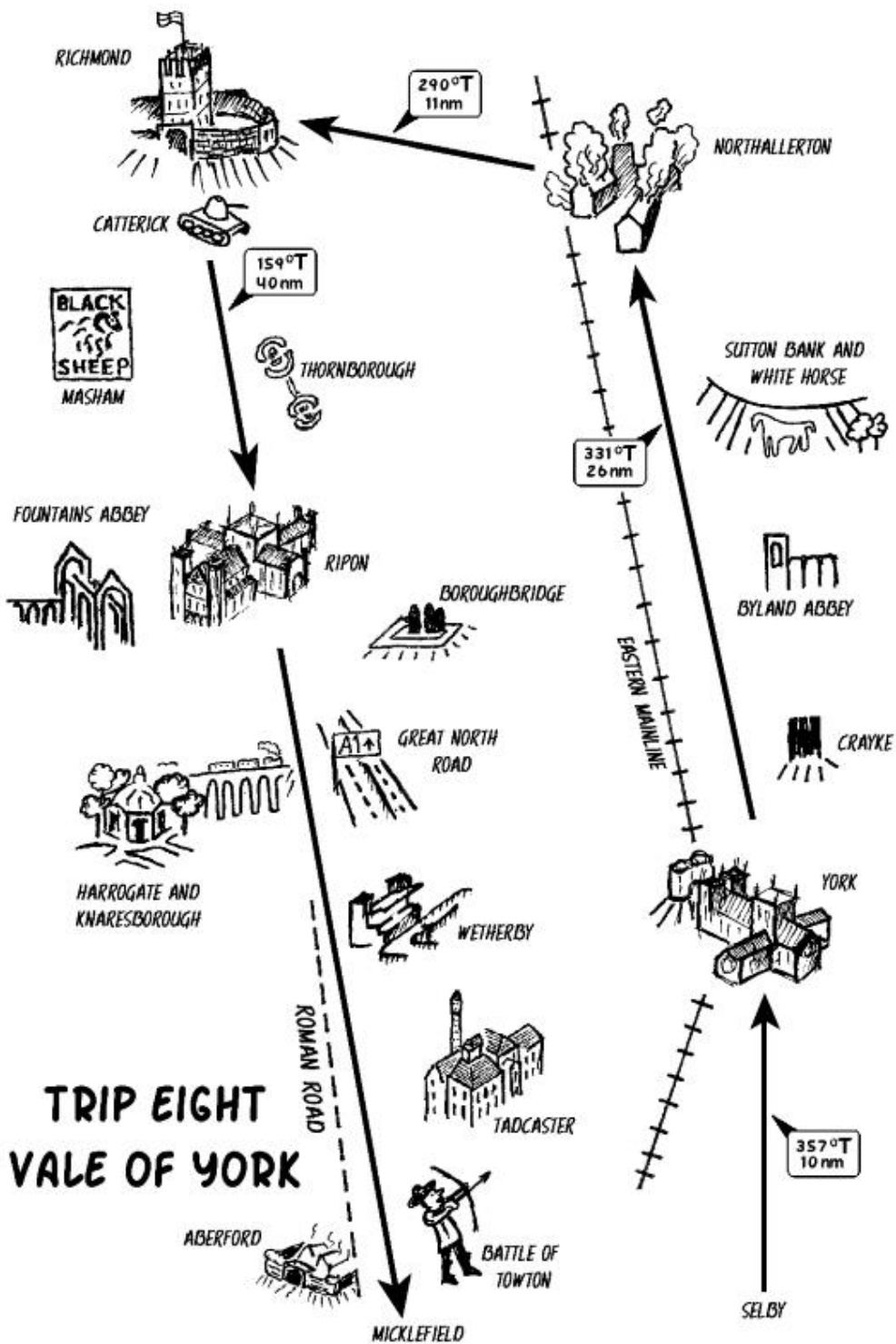
Wensleydale and Swaledale seem more rugged than the southern dales. Limestone scars such as the Shawl, Kisdon Scars, and Mallerstang north of Garsdale have the unstable scree slopes typical of the high dales. Most of these scars and the U shaped valley of Wensleydale were formed during the last Ice Age. Hadraw Force, which is the longest single drop waterfall in England at 90ft, and Asygarth Falls show how the limestone produces spectacular landscapes.

Arkengarthdale, to the north of Leyburn and Muker, is covered in the relics of old lead workings dating back 900 years. There are very early bell pits where the lead was mined in a circular chamber below ground. Lead from the Dales dating from 138 AD was used in the water systems, roofing, paint and domestic goods in Rome. The later 18th century “hushes”, where water was used to scour the surface away to reveal the seams of lead and minerals, still scar the landscape. In 1378 lead from Wensleydale was used to rebuild the gatehouse of Carlisle Castle. By the 1850's Preston Scar and Grinton Mill employed 250 men and produced 1000 tons of lead a year. But by 1900 the industry had largely vanished.

Further industrial evidence exists in the cotton and woollen mills of Wensleydale at Gayle, Bainbridge, Asygarth and West Burton. Of course the most famous product is the Wensleydale Cheese made at Hawes. It is likely that the monks that founded Jervaulx Abbey in 1150 brought the technique with them. Jervaulx was the principal landowner in this royal hunting forest of Wensley. Others were the Scropes of Masham, who built Bolton Castle in 1378, and the Neville family who built Middleham Castle in 1070, of whom Warwick the Kingmaker and Richard III were members. Pendragon Castle near Kirkby Stephen was built in the 1100's by that other great northern family, the Cliffords, but destroyed by the Scots in 1341.

But much of the landscape retains the marks of a much older history. The Roman fort at Addleborough, Virosidvm, is linked to the Roman road across Wether Fell. Near Reeth the great earthworks of Maiden Castle are typical of the iron age, but the Neolithic Castle Dykes Henge south of Asygarth is as much as 5000 years old. Similarly there is a possible 3000 year old Bronze Age village at Burton. Perhaps the strongest legacy today is that of the Vikings; place names are Norse or the related Old English. Great Shunner Fell, the innumerable Riggs, Haggs and Brae's. Hawes, Reeth, Mucker. But the name of the River Ure still retains the older echo of the Celts.

Today Wensleydale is a major route into the northern dales with Hawes, Asygarth and Leyburn popular destinations. Swaledale and Arkengarthdale are less visited and still retain the characteristic dales village shapes and design. But it is the rugged landscape that continues to draw.



TRIP EIGHT VALE OF YORK

RICHMOND

290°T
11nm

NORTHALLERTON

CATTERICK

159°T
40nm

BLACK SHEEP
MASHAM

THORNBOROUGH

SUTTON BANK AND
WHITE HORSE

331°T
26nm

FOUNTAINS ABBEY

RIPON

BOROUGHBRIDGE

BYLAND ABBEY

A1+ GREAT NORTH ROAD

EASTERN MAINLINE

CRAYKE

HARROGATE AND
KNARESBOROUGH

WETHERBY

YORK

ROMAN ROAD

TADCASTER

357°T
10nm

TRIP EIGHT VALE OF YORK

ABERFORD

BATTLE OF
TOWTON

MICKLEFIELD

SELBY

Trip Eight: The Vale of York

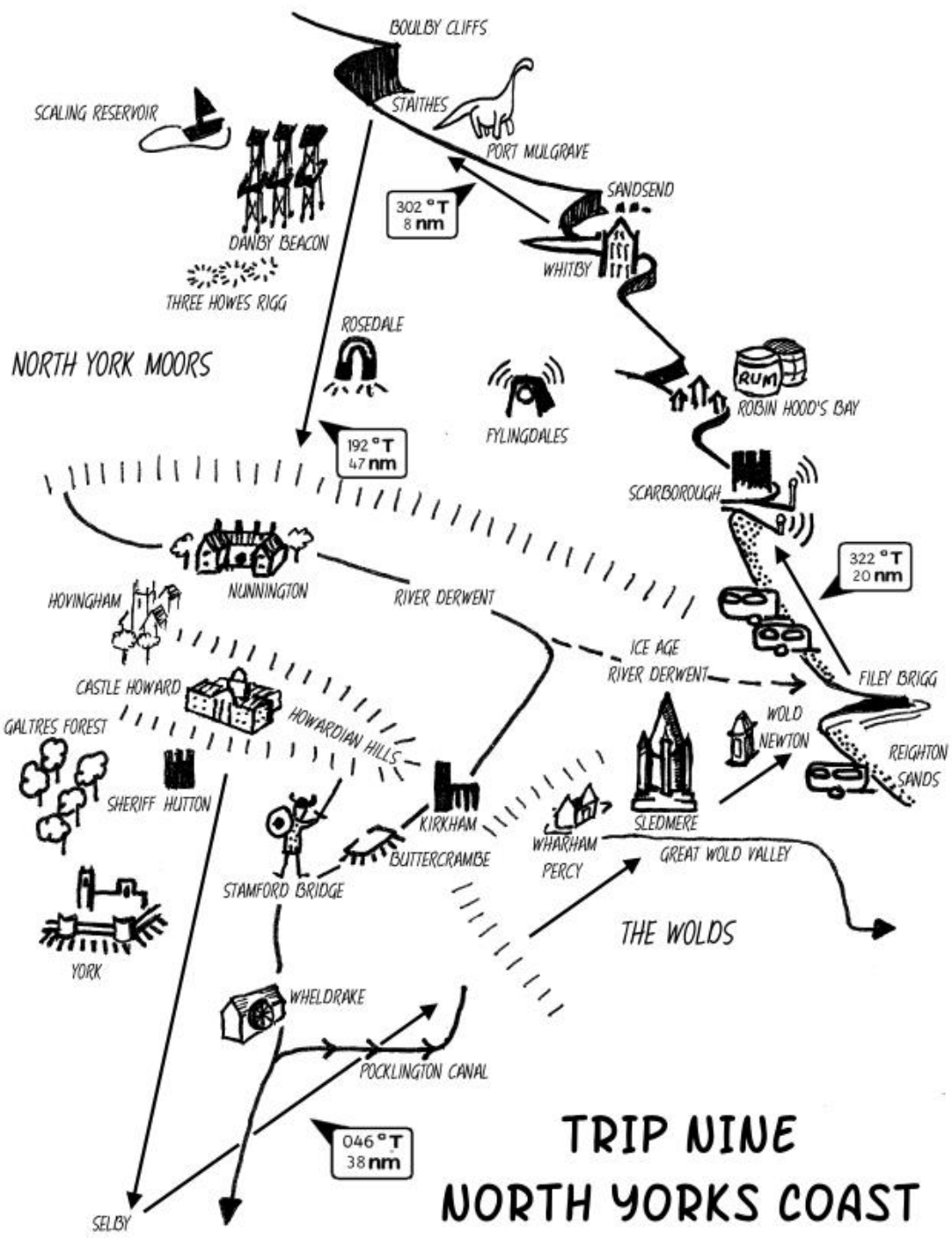
The Vale of York is formed on Red Triassic Sandstone between the Dales, the North York Moors and the Wolds. The River Ouse flows through a landscape of post glacial rubble, and gravel river terraces. This has always been the easiest route to the North. The A1 follows the older Great North Road, a coaching route of the late 18th Century, itself following the Roman road, Dere Street, which linked forts at Cataractonium (Catterick), Calcaria (Tadcaster) and England's second city of York.

It is a land of battles to control the wealth of the North. Between 866 and 950 AD the Vikings burnt Ripon Abbey to the ground, buried the Harrogate Hoard, and torched Masham. Northallerton was destroyed by the Normans (1069), the Scots (1138), the civil war (1642 and 1649), and the Jacobites (1745). In 1461 Britain's bloodiest battle at Towton featured 20,000 archers firing upwards of 300,000 arrows in about 7 minutes.

Settlements are clustered on the sand and gravel hills above the flood plain. The earliest are the Neolithic sites such as the Devil's Stones at Boroughbridge and the triple henges at Thornborough. There are Celtic settlements at Roulston Scar Camp above Sutton Bank and at Barwick on Elmet. There are Roman towns at Aberford and Aldborough near Boroughbridge. By 627 the Saxon King Edwin, whose capital was York, had begun building Northallerton, Tadcaster, Masham, the first abbeys of York and Ripon, and started the long construction of York minster. The Normans stamped their authority with castles at Richmond (1071), Thirsk, and Crayke (1153). The Vale was quickly divided between the monastic orders. Fountains Abbey (1132) was the largest in the UK and the other abbey's of Ripon (1154), St Mary's York (1086), and Byland (1135) were all significant landowners. There was the growth of markets such as the 1250 chartered market at Masham.

By 1778 Harrogate, already a spa town in 1626, had begun to take on its modern appearance with the Stray. Race courses at York (1731), Catterick (1783) and Northallerton (1773) are a product of leisured classes. Wetherby, Thirsk and Ripon racecourses moved to their current locations in the 19th Century.

During the 19th century the Vale was not heavily industrialised, tending towards food production such as chocolate in York, and brewing at Tadcaster and Masham. The 1855 railway from London to Edinburgh and the completion of York Station, the largest in the world in 1877, made York a railway city and significantly changed its shape. Today the Vale is still a key transport route to and from the North. Its' principal towns and cities, its' wealth, and even the landscape itself continue to reflect those much older influences of agriculture, geography, and power.



TRIP NINE NORTH YORKS COAST

Trip Nine: North Yorks Coast

The complex geology of the North York Moors produces the spectacular cliffs and bays of the North Yorks coastline. At Boulby the cliffs are the highest in England, at Robin Hood's bay the deeply cut valley enabled a roaring smuggling trade based on the 170 ships that used the port. It is a mineral rich area where alum mining, a fixative for wool dyes, led to the discovery of the first dinosaur bones at Boulby. Jet has been worked at Whitby since Neolithic times, magnetic iron ore was produced at Rosedale, and at Port iron stone was shipped to the furnaces of Jarrow and the Tyne.

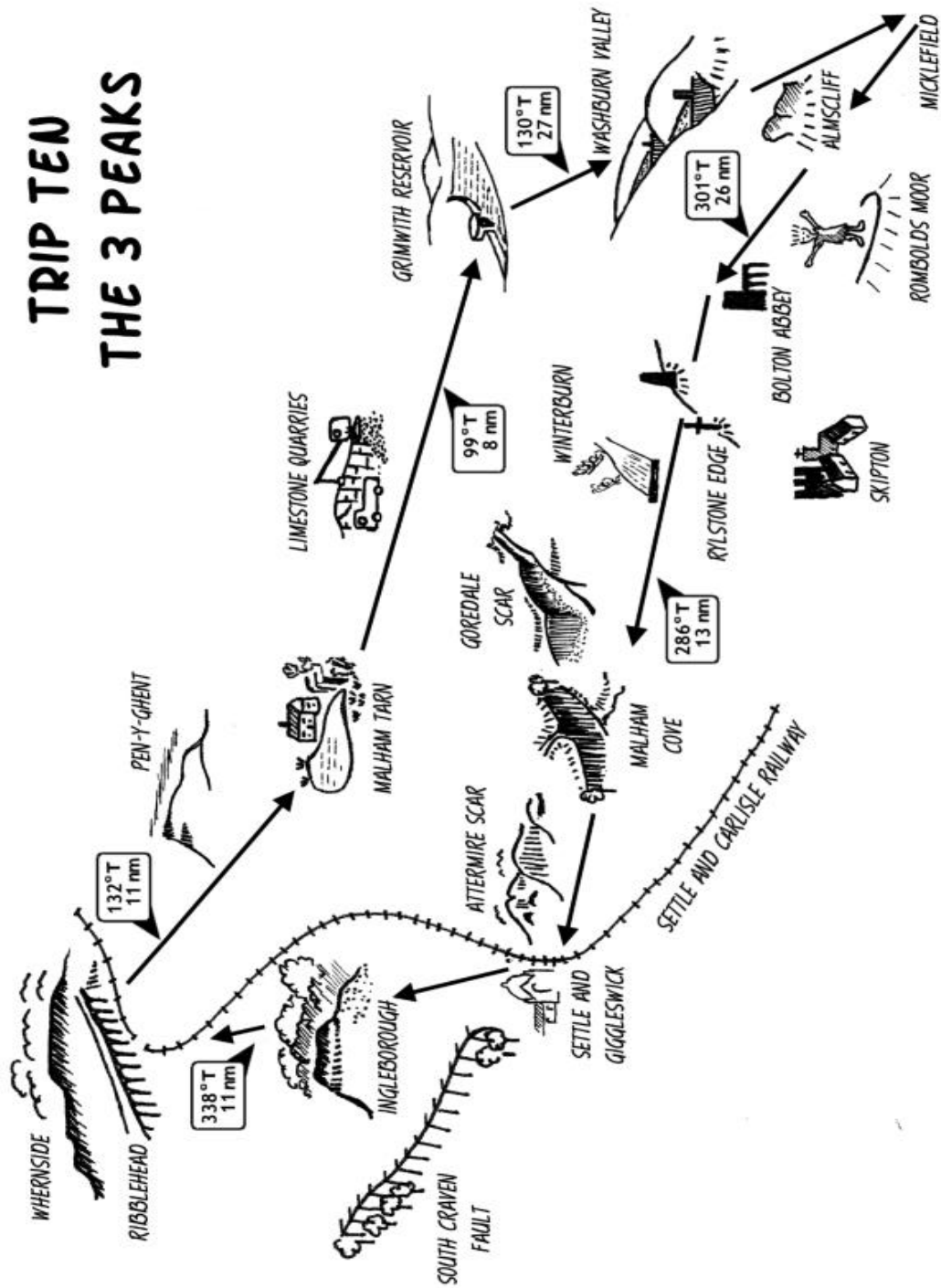
At Whitby Abbey the Synod of Whitby, in 664AD, the Catholic Church absorbed the rival Celtic church as the national religion for England,. The hills of the Wolds and the Moors is littered with Bronze age enclosures and tumuli such as Three Hawes Rigg and Wold Newton. This high ground allows early warning of threats, be it the Roman Signal towers at Ravenscar, the fort at Scarborough, the WW2 radar site at Danby Beacon or the present day Fylingdales radar. The Norman castles at Sheriff Hutton and Scarborough, protecting hunting forests like the Galtres forest north of York, are ancestors of later estates such as those at Nunnington, Hovingham and Sledmere. Castle Howard shows how the original Norman overlords became the landed gentry of the mid 18th century. The power of these estates can be seen at Warham Percy, a medieval village cleared because the land was more profitable growing sheep than crops. The memorial to the Wolds Waggoners at Sledmere is to the skilled horse drawn wagon drivers of the estate, recruited in WW1 by the landlord. The memorial at Wold Newton is, on the other hand, only to a meteorite.

Originally the Derwent entered the sea at Filey but, at the end of the ice age, a huge lake formed in the Vale of Pickering which broke through the hills at Kirkham. The resulting course of the River Derwent has always been an important navigation. At Buttercrambe there is a Roman Camp, and last Viking invasion stopped at the important river crossing of Stamford Bridge. The Derwent has powered many water mills - at Wheldrake there is a Roman mill weir, and in the 1300's there were water mills at Kirkham and Elvington. By 1793 there were 35 vessels on the Derwent supplying corn to West Yorkshire and importing coal in return, which led to the opening of the Pocklington Canal in 1815.

Although the coming of the railways in 1845 led to a huge expansion of Scarborough it was the Great Plague of London that set the town up as a Spa town in the 1700's. The "Spaw Water" seemed to cure most ills ! Filey was rebuilt as a tourist town in 1835 and today there are caravan parks at Reighton Sands, an all year round tourist trade at Whitby, and teashops where coastguard's fought smugglers on the quay at Robin Hood's Bay.

TRIP TEN

THE 3 PEAKS



Trip Ten: Three Peaks

With their characteristic alternating steep bands of limestone and gentler slopes of shale Ingleborough (2376'), Pen-y-Ghent (2277') and Wharfedale (2415') dominate the plateau of limestone pavement. Each of them has a millstone grit cap which protected the hill when the rest of the landscape was eroding away. The limestone of the Malham area was produced in shallow warm seas that also produced the huge coral reef still visible at Rylstone and Cracoe. About 270 million years ago renewed geological activity caused the limestone to fault. The South Craven fault is the more visible, running from Settle to Ingleton. Between Malham Tarn and the Cove salts precipitated in the North Craven Fault eventually turned into the zinc exploited by the mineral industry of the 18th and 19th century.

At Malham Tarn the last ice age produced a huge lake which spilled over Malham Cove and Gordale Scar. The tarn eventually shrank to its current shallow state (less than 3m deep) leaving the Malham Cove a 72m high dry waterfall. Hippo, reindeer and mammoth were killed by stone age people living in Victoria and Jubilee caves near Attermire Scar. There are stone age, bronze age, iron age and medieval settlements at Malham Tarn, as well as the later house where Kingsley wrote the "Water Babies". Ingleborough itself was both an iron age and Roman hill fort. There is also a 20 acre Roman fort between the tarn and the cove. Like so much of Yorkshire land ownership changed with the 1086 harrowing of the north - Skipton Castle was built in 1090 and was one of the Clifford castles. It was they that gifted Bolton Abbey its' site although this eventually passed to the huge Devonshire Estate. Despite this, the Saxon towns of Settle and Skipton grew rich with the medieval wool trade. Giggleswick School, with its' Victorian domed chapel, originally dates from 1512 as a church school.

With the Victorian transport revolution crossing this landscape demanded spectacular engineering like the Settle & Carlisle Railway (1874). The remains of the navvies camp, where 80 died of smallpox, can still be seen at Ribbleshead Viaduct. At Winterburn a new reservoir had to be constructed in 1893 to meet water demand from the 1777 Leeds & Liverpool canal which was still growing despite the coming railways. Other reservoirs of the Washburn Valley were typical Victorian solutions to water supply in West Yorkshire. Grimwith reservoir was completed in 1983, enlarging the Victorian original some 20 times to store five billion gallons of water.

The mines are gone, but some 4 million tons of limestone are still taken from quarries like Rylstone and Threshfield, mainly for aggregate. The hills still support sheep farming. The 3 peaks continue to draw fell walkers, and the limestone crags, like their gritstone equivalent at Almscliff, still provide world class climbing. Looking north from his moor The Giant Rombold must still be captivated by the high fells and the sound of curlews on a summer evening.