

THE OPENCAST WAY

The Opencast Way is a 32 mile circular walk around Scunthorpe utilising the Scunthorpe Ridge Walk and public footpaths through parts of the adjacent Parishes of Bottesford, Messingham, Holme, Broughton, Appleby, Roxby cum Risby, Winterton, Burton upon Stather and Flixborough. The Ridge walk traverses the old Parishes of Crosby, Scunthorpe, Frodingham, Brumby and Ashby, now incorporated into the town of Scunthorpe.

The Route is titled after the method of extraction of the many and varied mineral deposits which was historically practised in the Scunthorpe Area, and in some instances still continued today. Typical examples are Limestone, Gravel, Sand and, of course, the mineral synonymous with Scunthorpe, Iron Ore.

All of the route is associated with The Lincoln Edge, known as Lincoln Cliff in the south of the County, and is that portion of a major oolitic limestone escarpment that runs through the old Lincolnshire counties of Lindsey and Kesteven, and is a prominent landscape feature in a generally 'flat' county. Never rising more than 60m. above sea level it runs for 50miles from the Leicestershire border near Grantham to the River Humber. However, this band of limestone actually continues south and through to Portland Bill in Dorset and formed an ancient highway, The Jurassic Way, which generally followed the line of the Escarpment.

The western side of the Edge is the Escarpment and overlooks the Trent Valley whilst the Eastern side, the Dip Slope, was until Napoleonic times, open desolate Heath Land. Prior to 1859, the year that Ironstone was rediscovered, the villages in this area had relied for their livelihood solely on agriculture and the breeding of wild rabbits. These extensive sandy commons made admirable breeding grounds or Warrens for the silver grey and black rabbits whose skins could be sold at Brigg Fur Market for 1s 6d (7.5p). The whole district was thinly populated owing to this poor nature of the soil and the population of the area in old Borough of Scunthorpe amounted to 1245 persons at the 1851 census, the last one before the working of ironstone commenced.

Opencast Mining

Open Cast Mining is a surface mining technique of extracting rock or minerals from the earth by their removal from an open pit or borrow, sometimes called Open-Pit Mining. Stone in the Scunthorpe area had for a long time been extracted from 'Stone Pits' for the making and mending of roads and this term was commonly used. When it was discovered that this stone contained iron these old Stone Pits inevitably became the nuclei for iron ore extraction and thus enlarged to become 'Quarries'. However, in this area the name Pit persisted, irrespective of size, taking its name from some local feature or name. Hence there was Common Pit (Brumby Common), Conesby Pit (Conesby Farm), Thealby Pit (Thealby Village). This was the same with sand and gravel extraction and these opencast mines or quarries are often referred to locally as 'Pits', particularly around Messingham.

Other extractive methods usually require tunnelling into the earth, and consequently is much more expensive. So Open-Pit mines are used preferentially to their utmost limit before underground work is considered. In lots of cases the deposits were relatively thin or the ground structurally unsuitable for tunnelling, as in the case for sand or gravel.

However underground mining was carried out extensively in this area for iron ore

when the opencast deposits became exhausted or the ratio of overburden to ore made the process commercially unviable.

Disused Pits or Quarries often became flooded, as will be seen, and in some cases have become used as wildlife centres, fishing and even for water sports. Others are being used as landfill for the disposal of solid wastes including household.

The Route

The Official Start is a Finger Post at the entrance to Atkinsons Warren Car Park on Ferry Road, Scunthorpe. The name Warren will frequently pop up on the Walk and more will be said about it later, but Atkinsons Warren was named after Walter Atkinson, Gamekeeper to the Sheffield family of Normanby. Walter lived in the South Shooting Lodge of the Warren from 1905 to 1966. The Route can be walked in either direction either as a Challenge Walk for those who feel it should be walked continuously in one go, or in split into Sections of either of 2, 3 or 4 dependent on ones capabilities. Adequate car parking is available along the route for those walking in stages, and these will be highlighted in the route description.

For the purposes of simplicity I have split the walk into 4 stages as follows:

Stage 1. Atkinsons Warren (878122) to Messingham (883045). 8.0 miles.

Stage 2. Messingham (883045) to Raventhorpe (936077). 7.5 miles.

Stage 3. Raventhorpe (936077) to Risby (926148). 8.3 miles.

Stage 4. Risby (926148) to Atkinsons Warren (878122). 8.4 miles.

The Walk is covered by Ordnance Survey Explore Maps 280, Isle of Axholme and 281, Ancholme Valley, 1:25,000 scale.

Stage 1: Atkinsons Warren to Messingham

This stage initially follows the Scunthorpe Ridge path, generally southbound near the top of the Escarpment, and is well signed.

Exit the small car park on Atkinsons Warren onto Neap House road, 878121, cross the road and turn left up Crosby Hill. After the houses turn right along a signed path passing through a grassed area overlooking Berkeley Infants School through the trees. The path runs into Sherwood Vale road leading to Doncaster Road, A1029. Cross the A1029 onto Cliff Closes Road and turn immediately right down a small slope into Central Park. Follow the line of houses on Cliff Closes Road to reach the A18, Kingsway. Cross the A18 at the junction with Church Lane and continue, slightly uphill, and cross Brumby Wood Lane. Turn right at a waymarked sign immediately after the A18 Pedestrian Crossing Traffic Lights, and follow the path South eventually crossing West Common Lane near the 6th Form College on the new footbridge.

This bridge, one of two was opened in 2013 as part of a £3.4 million project, the Sustrans Connect 2 Scheme, to provide in general a network of walking and cycling routes and specifically to improve The Scunthorpe Ridge Walk opened in the 1970's. The other bridge crosses Bridges Road and was opened in 2011.

Continue along the path crossing Bridge Road and through the 33 acres of Manor Park reaching Burringham Road, B1450, which is crossed at the pedestrian crossing.

Manor Park was revamped in 2012 featuring the regions first Adizone Outdoor Gym boasting the very latest equipment including a climbing wall, running machine and basketball area.

Go through a gap between houses reaching, and continuing along the cul de sac of Grasby Road turning left along Ferriby Road which is crossed in approx. 100yds. Turn right along a green belt below Caenby Road and follow this crossing Spilsby Road and between Maltby Road and Ormsby Road to reach Manby Road. Cross Manby Road and the green belt widens to reach Enderby Road. Choose your own route over the green belt.

Here we leave Scunthorpe and cross the road into the neighbouring town of Bottesford where the green belt continues but with a tarmac path crossing Hammerton Road and into Greenacre Park where there are fine views over the Trent Valley. There are several path alternatives but keep heading south to exit onto Brankwell Crescent.

Greenacre Park was part of the Leys Farm Residential Estate, 1961, where agreement was reached between the Town Council and the developers to leave a green belt for the community at a cost of £1 million. The whole park was rejuvenated in 2009 including the provision of new equipment in the children's area.

Turn right down Brankwell Crescent and then sharp right onto The Dales and then left onto Hurst Lane to reach the mini roundabout with Moorwell Road, Yaddlethorpe. Cross here and walk the full length of Croft Lane to a gate and finger post indicating straight on. Go through the gate and follow the track first in a south west direction and then south. Ignore a track to the right which goes direct to Scotter Road. Follow the waymarked signs to reach a large field and turn right and with the field on you left follow the field boundary to reach Bottesford Beck.

At Bottesford Beck there is evidence of an old track which at one time linked up with Gravel Pit Lane at the bottom end of Yaddlethorpe High Street This is shown on the 1824 – 1841 Ordnance map, No. 112. Presumably this was route travelled by workers from the area to the now redundant gravel pits adjacent to Scotter Road. These have now filled with water due to the high water table here. Yaddlethorpe is village within the Township of Bottesford.

Follow the Beck in a westerly direction, up the slope to reach Scotter Road (A159), turning left to cross the M180 motorway by a footbridge adjacent to the road. Do not cross the road barrier on either side of this bridge to the A159 but cross the footbridge and continue through trees adjacent to a stream to emerge at the road entrance to the Old Messingham Water Mill and Bleaching Yard on Bottesford Beck. This is now Messingham Parish.

Nothing much remains of the Messingham Water Mill only a derelict house and outbuildings.

Continue walking south along what is now called North Moor Lane to reach a finger post on the left. Extreme care should be taken on this section of road as traffic can be heavy and fast. Cross the dyke at the small bridge and then immediately turn left then right around the edge of the field alongside The Catchwater dyke which separates it from Kieradan Park.

Kieradan Park is the new motocross (MX) track for the Scunthorpe area with four tracks of varying degrees of difficulty as well as a minibike track and a kids auto track.

When you reach the end of the dyke turn right along the eastern edge of the field with a hedge on left hand side. Walk to the end of the field and on reaching the next field on the right go through a gap in the hedge and continue walking in the same direction with the hedge now on the right. On reaching a lane at the end of the field, follow the way markers indicating left and walk uphill regaining the limestone ridge. At the top of the hill follow the track round to the right and pass on your left the Recreation Ground and Messingham Holy Trinity Church. Immediately after the Church a footpath track on your left leads you to Temperance Avenue and continuing south a left turn takes you into Church Street, passing the Methodist Church on your left and on to High Street. This is the end of Stage 1.

Messingham is a large village of over 4000 people supporting a variety of shops and businesses around the High Street. Up to the beginning of the 20th century agriculture was the main occupation but with the introduction of steelmaking in North Lincolnshire and the development of less labour intensive farming methods, land workers drifted into more industrial based occupations, particularly in nearby Scunthorpe.

The Holy Trinity Church is a stone building, in the style of the fourteenth century, partly rebuilt about the year 1818 at a cost of £2000. In latter years there was a sycamore tree which stood on the site of the village cross and was called The Cross Tree and was noted for the fact that John Wesley, the founder of Methodism, preached under it. One of the local public houses is called The Green Tree. Around the village are numerous used and exhausted sand quarries. The largest of these in production today is owned by Sibelco UK and has been in production since 1996 covering 300 acres with a recent investment to increase this by a further 150 acres. Sand from this quarry is one of only three or four in the UK that is suitable for the production of brown and green bottles due to the high standards set by glass industry.

Redundant workings see much of the land returned to agriculture with other areas set aside for nature conservation and some have been commended for their restoration by the Mineral Products Association (MPA) and Natural England.

One particular site, 'The Messingham Sand Quarry Nature Reserve' has achieved the status of 'Site of Scientific Interest' (SSSI) under the Wildlife and Countryside Act. It is managed to create open water, wetland, and woodland, with some re-establishment of natural heathland vegetation. The site is particularly important for its insect fauna and also supports a diverse breeding bird colony.

Much of the site is occupied by flooded sand workings and is fringed with reeds and

reedmace. The wetland plants include most notably, pillwort, a plant of local and decreasing distribution in the UK.

On the restored land both broadleaved and coniferous woodland have been planted and in more open areas grassland and heathland communities are developing. The latter contain species such as heather, petty whin, wood sage and heath dog violet characteristic of the covesand heathlands once widespread in this area.

Sixteen species of dragonfly have been confirmed breeding constituting an exceptional level at this latitude. 20 species of butterfly and 250 species of moths, including the very rare scarce-vapourer moth have been recorded, as well as numerous beetles and bug varieties and 100 species of bees and wasps.

Over 180 species of birds have been recorded on the site of which 70 are known to have bred regularly, including great crested grebe, teal, shoveler, tufted duck, ringed and little ringed plover, nightingale and a colony of several pairs of reed warbler. Widgeon, kingfishers, linnets, chaffinches, bullfinches, great tits, goldcrest, wrens, sparrowhawks and terns are among other wildlife highlights.

Other redundant quarries around Messingham are now prize fishing venues and one covering an area of 66 acres claims to be the North's Premier fishing venue with many varieties of fish, with carp being the favourite of anglers.

Stage 2: Messingham to Raventhorpe.

From the junction of Church Street and High Street head south and turn left just before the Cooperative Store along Wendover Road. On reaching Danby Road turn left onto Aysgarth Avenue, walk for a few yards and then right turn into Kealholme Road. Continue and turn left down Egton Avenue walking to its end to pick up a track leading across fields to Briggate Farm. Pass the farm and continue walking east ignoring the right of way sign pointing south along a farm lane. The path is well signed and soon reaches the corner of a small wood where it veers first left and then right to reach an open arable field which it crosses with a well defined route towards some trees and an old sand pit This is a classic sand extraction area with numerous, both used and disused pits all around. Pass through the trees to the next field and follow the track uphill to meet a large vehicular track linking Low Farm on the Messingham / Greetwell road and Holme Lane. Turn left to reach Holme Lane adjacent to the Holme Plantation.

Turn left at the corner and follow Holme Lane back towards Messingham passing the Messingham Paintball Centre on the left.

The Messingham Paintball Centre boasts 12 varied game zones with gaming environments like Thunderball, The Village, Huts from Hell, The Castle and Fort Knox, catering for a maximum of 60 players at one time. The facilities include parking, toilets, changing rooms and a comfortable safety zone as well as expert marshalls and top of the range gear.

Continue along Holme Lane ignoring a private gate on the right to a disused sand pit,

until reaching a right of way finger post to access the pit / lake area by this route. Cross between ponds and over a small bridge and follow the hedge on your right to Slate House Farm. This bridge crosses the dyke which is the Parish Boundary of Messingham and Holme.

Slate House Farm is a popular car boot and market facility operating from March to October at the weekends.

Continue in the same general direction across a field, through a waymarked gap in the hedge, another field and crossing the access track to Willow Farm. Cross yet another field reaching a waymarked gap in the hedge and turn immediately right onto the drive of Kestrel Lodge leading back to Holme Lane. Turn left along Holme Lane crossing the M180 Motorway, opened in 1977. Immediately over the bridge look for small gate adjacent to the large wrought iron gates of Kestrel Lodge. Pass through the gate and follow the field edge near Aspen Farm to reach a small strip of trees and then through an obvious gap following a farm track to reach Holme Lane, this time from Bottesford.

This area was once known as Holme Warren (or Common) and is now agricultural land although part of it became the site of Holme Hall Golf Club which is a few hundred yards away to the right along Holme Lane.

Turn left along Holme Lane passing a house called 'The Beeches' to reach the entrance to 'The Pink Pig' Farm. This area was once the site of Holme Hall.

The Pink Pig Farm, although still a working farm growing wheat, barley, oil seed rape carrots and Birds Eye peas is now a popular theme farm raising their own pigs and sheep as well as over 300 free range chickens. Together with its restaurant, cafe and farm shop, is visited by over 120,000 people a year as well as over 1,000 schoolchildren and organised visits. They raise, make, bake and cook over 70% of their produce as well as that from over 30 local suppliers.

Continue along Holme Lane and at the end of the small copse follow the sign to the left along the western boundary of the 'Pink Pig' until a hedge is reached. Pass through, turn right and walk along a farm track with the hedge on your right eventually passing a tall telecommunications mast just before Holme Wood. Turn right and follow the wood edge until a large gap is reached with a path leading down to a footbridge over Bottesford Beck, the Parish Boundary of Holme and Bottesford.

Bottesford is mentioned in the Domesday Book and has Grade 1 listed church dedicated to St. Peter Ad Vincula built on the site of an earlier Saxon Church. A small diversion from the Walk, uphill from the footbridge leads you to the Church.

Turn right and with the Beck on your right Holme Lane is soon reached and crossed and shortly after that the Parish Boundary of Bottesford and Scunthorpe is reached just after a significant kink in the Becks course. The recent urban housing developments of both Bottesford and Scunthorpe are very much evident on the left. Very soon the northern end of Holme Hall Golf Club is visible above the opposite bank, the Beck being its northern boundary. Continuing to a waymarked sign the path leaves the Beck turning north and

around the western side of Ashby Ville Ponds reaching a wooden footbridge walk behind the Morrisons supermarket. Take this and follow the path, keeping the pond to your right. At the south – east extremity follow the path left a short distance through some trees which takes you back to Bottesford Beck, and with this on your right follow it to the main A18 Trunk Road which crosses the Beck at Emmanuel Bridge.

Ashby Ville Ponds (Pits) are the remnants of old iron ore extractions at the southern end of the iron ore outcrop extending from Coleby in the north. The iron ore outcrop being approximately 7 miles in length and 1.5 miles in width from west to east. Many trial borings were taken in the Ashby Ville – Brat Hill area and eventually a large cut or gullet was made 15 to 20ft deep in 1903, right down to Bottesford Beck, a length of some five to six hundred yards. For this grab cranes were used replacing a lot of manual labour which was getting ever more difficult to obtain. After much stone extraction it was eventually realised that the ore here was of inferior quality. Compounded with the Pit having a reputation as being very wet, requiring extensive drainage by pumping it was eventually abandoned leaving the Ponds as we know them today. They did become a source of water for the works for a short period afterwards.

Despite these problems exploratory work continued further south across Bottesford Beck to Holme Warren or Common, where the Holme Hall Golf Links are, and to Aspen Farm, both places having been passed en-route. These explorations were unfruitful and only confirmed that the Ironstone bed in profitable and workable quality did not extend southwards beyond the A18, or as it was then, the Ashby to Brigg Road.

Today the Ponds feature lots of wildlife and fishing pegs are provided in certain areas for those enthusiastic about the sport. Adjacent to the A18 an area has been provided for jet skiers.

These ponds have seen many tragedies over the years, the most recent tragedy being a 12 year old boy in 2008, Lebohang Charrington Sibanda, and a memorial is placed beside the walk close to the entrance near Whimbrel Chase.

Cross Bottesford Beck on the A18 by Emmanuel Bridge and walk along the side of the A18 to cross it where the central barrier of the dual carriageway ends taking great care as this is a very busy road. Once across turn right and follow the roadside footpath uphill, latterly through trees, to reach a lay-by and formerly the old road. This uphill section is known as Mortal Ash Hill. Good parking is available here and makes a convenient end to Stage 2 of the Walk. A roadside cafe is available if refreshments are needed.

Note the southern end of the giant TATA Iron and Steelworks, formerly British Steel, on the left hand side. The large building is the main steelmaking plant producing up to 4mt per annum.

Stage 3: Raventhorpe to Risby.

Leave the lay-by at the signpost and follow the waymark through the wood crossing a stile and open field the lane leading to Raventhorpe Farm.

Notice the humps and bumps in the field as this was the site of the medieval village of Raventhorpe.

Just past the farm a farm track leaves the lane to the right at a fingerpost, and heads diagonally up the hill to reach the edge of a wood. There are good views of the Steelworks from here and also the remnants of Manby Hall demolished many years ago. Continue across Raventhorpe Park open fields To reach Manby Woods.

In these fields North Lincolnshire's first Solar Energy Park is being created, a £25 million plus 40MW project which should provide electricity for up to 11,400 homes.

Continue in a generally easterly direction crossing Home Beat Drive, the old road from Briggate Lodge to Manby Hall, eventually surfacing on the Roman Ermine Street in Broughton. From here turn left and follow the footpath to a mini roundabout outside The Dog And Rat Pub. Here turn left on the B1207, Appleby Lane, and continue until Westminster Road on the Right is reached. Opposite this a finger post points to re-entry of the woods by a very distinct track.

Broughton is a small town, since 1974, and has grown considerably from the old village. A Neolithic Stone Age settlement has been found on the Commons nearby where stone tools were discovered. Broughton's St. Marys Church is thought to date back to the 11th century with alterations in the 12th, 14th and 17 centuries. With substantial new housing developments to the north and north west of the town the population of Broughton exceeded that of its near neighbour, Brigg at the 1911 Census. Refreshments are available at The Dog and Rat which is adjacent to a Cooperative store just across Broughton Beck.

Quarrying was also carried out in Broughton, usually for limestone to provide lime for agricultural land and the best example is near the Walk adjacent to Ermine Street (Appleby Lane). This is Clapgate Pits and the rich and varied limestone flora is considered to be the best in North Lincolnshire. Notable among these are pale St. Johns-wort, squinancywort and wall germander. This was formerly the most northerly site in Britain for pasqueflower but the plants were apparently dug up by vandals in 1969. In recent years scrub has enveloped much of the Pit but this has been cleared and sheep introduced to restore and maintain grassland flora.

Continue along this track ignoring all tracks to the left and right and follow the arrows and finger posts to the edge of the wood to exit near to a poultry farm. Immediately turn left and follow the wood edge to the end and then turn right and north along a grassy field edge. Continue to a farm track and turn left down this ignoring the Permissive Footpath sign straight ahead. This track winds downhill to reach the ruins of Gokewell Farm, originally built from stone from the now destroyed Gokewell Priory.

Gokewell Priory was a small religious house covering approximately 1 acre and founded in 1185 by William De Alta Ripa. The Priory never had much money for its upkeep and at any one time there was no more than 10 or 11 religious sisters here and at the dissolution in 1536 only 7 were left. The sisters led a very spartan life of prayer and pennance and beside that very little in the way of food apart from fish from their own ponds which can still be seen today.

Follow the farm to Little Crow Covert and on to a tee junction with a Works road where the route turns right and continues in a northerly direction. After a few yards Appleby

Parish is reached, as Santon is in that Parish. Be careful to follow the direction markers and finger posts as this area is on the easterly edge of a large expanse of Open Cast Ironstone excavations and wandering off track can be very dangerous..

These excavations stretch from Dawes Lane to Emmanuel Bridge over Bottesford Beck. For this purpose Bottesford Beck was diverted some several hundred yards east from its natural line into a newly cut watercourse. Open Cast excavations are visible all along this section.

To the left the full vista of the TATA Iron and Steelworks can be seen, from the Steelplant near Emmanuel Bridge to the Coke Ovens on Dawes Lane. The most obvious feature are 'The Four Queens', these being the four blast furnaces from left to right, Victoria, Anne, Mary and Bess, originally part of Appleby – Frodingham Iron and Steelworks. A brief history of the developments is as follows:

Iron ore was first mined on a commercial scale in the Scunthorpe area in 1859 on land belonging to Mr. Charles Winn an ancestor of the present Lord St. Oswald of Nostell Priory in Yorkshire. His son Rowland Winn lived at Appleby Hall and is credited with the rediscovery of the iron ore. Owing to the lack of a mainline railway the ore was transferred by cart to Chattertons Wharf on the River Trent near Neap House Here barges took it via the Keadby and Sheffield Canal for smelting at Elsecar, near Sheffield. In 1861 a narrow gauge railway was built from the top of Brumby Wood Lane to a new wharf at Gunness. Winn knew that the best way of exploiting the iron ore fields was for a rail link to be built from Keadby to Barnetby, for which he campaigned tirelessly, and eventually construction work starting in the mid-1860's and completed in 1864. He persuaded the Dawes brothers, to whose ironworks the ore was being supplied, to build an ironworks at the site of the iron ore fields at Scunthorpe. Construction of Scunthorpe's first ironworks, the Trent Ironworks, began in 1862, with the first cast from the blast furnace being tapped on 26 March 1864.

Other ironworks followed: building of the Frodingham Ironworks began in 1864; North Lincoln Ironworks in 1866; Redbourn Hill Iron & Coal Company in 1872; Appleby Ironworks blew in their first blast furnace in 1876; and the last constructed being Lysaghts Iron and Steelworks in 1911, with production starting in 1912. Crude steel had been produced at Frodingham Ironworks in 1887 but this proved not to be viable. It was not until Maxmilian Mannaburg, an Austrian, came to Frodingham Ironworks in 1889 to help build and run the steelmaking plant and on the night of 21 March 1890, the first steel was tapped.

Rowland Winn is remembered in the town by three street names: Rowland Road, Winn Street and Oswald Road. He assumed the title Lord St. Oswald in 1885. Nostell Road was also named after the family seat at Nostell Priory.

Soon a metalled Works Road is reached which is crossed onto a footpath leading down the side of a railway bridge where a right turn following the road takes you into Santon Village.

This railway bridge is the main access route onto the Works for Rail Traffic from the Doncaster – Cleethorpes Line, which ironically is the feeder line for the Foreign Iron Ore which is now used at the Iron and Steelworks. This ore arrives in the UK at the companies dock at Immingham. In 1981 it was decided to close all the local mines and quarries, the local ore being around 20% iron and the foreign ore being 60–70% iron. At the same time, British Steel closed all its other mining operations around the UK. There are still many

millions of tonnes of proven reserves of ore in Scunthorpe but it is cheaper to use imports for the time being. Scunthorpe changed to Foreign Ore Practice and the development was known as the Anchor Project.

At the other side of the bridge can be seen the Slag Works, an important subsidiary of the Iron and Steelmaking processes and mainly used for roads.

Continue through Santon Village being very careful where the footpath ends, following the road as it swings left and then right to reach a finger post pointing sharp left towards Low Santon Farm. Continue down this Lane and under the Doncaster – Cleethorpes Railway to reach the Farm and follow the direction arrows around and through the Farm Yard.

Low Santon Farm is the headquarters of County Turf Ltd who are a grower and supplier of high quality turf for sports, amenity and landscaping, having supplied turf to the London 2012 Games including the Olympic Stadium. More than 5 million square metres of turf is grown on some of the coarsest, freedraing rootzone in the UK.

Continue on the Farm Road to reach a small wood which is crossed turning immediately right near a recently demolished house.. The route has been diverted here due to subsidence of the Underground Santon Iron Ore Mine.

Santon Mine (originally called Winns Mine after the owner) was opened in 1938 and was the first deep ironstone mine in this area apart from a shaft sunk in the very early days by the Frodingham Iron Company. It was some 325ft below the land level. In 1969 it was linked to the Dragonby Mine and worked as a single unit, the only shaft being at Santon. This shaft was infilled in 1980, although re-opened in 1983/84 to allow regular inspections beneath rods and reservoirs. There is no ore extraction now.

Follow the way arrows and the diverted path across Risby Warren to reach a metalled road from Risby Warren Farm leading to Risby Road. This is the end of this stage and car parking is available at the side of the road adjacent to the crossroads with Risby Road.

Risby Warren is a sight of Special Scientific Interest under the Wildlife and Countryside Act 1981. It is the largest surviving area of the once extensive heathland that covered the Lincolnshire Limestone Escarpment. The windblown sands are up to 10m thick and deposited about 8,000 BC. Few good examples remain and Risby Warren is exceptional in demonstrating their surface morphology and dune forms. The mosaic of plant communities includes not only one of the finest inland dune systems in Britain, but also heathland. The vegetation is maintained by rabbit grazing. The dune ridges were stabilised during the 1920's with the introduction of Marram Grass. Other plants include sand sedge, bucks-horn plantain and common cudweed. Bracken dominates the more loamy south facing section of the dunes. For a full list of the flora visit the SSSI website, Risby Warren.

Stage 4: Risby to Atkinsons Warren.

From the crossroads head in a generally north direction along Brackenthorpe Road past Brackenthorpe Cottages to reach the village of Roxby. Having rounded Hall Farm keep straight on at the tee junction and follow South Street to reach a left turn and a short lane to

North Street, and opposite St. Mary's Church.

Roxby stands on a prominent part of the Lincoln Edge overlooking the Humber Estuary, and forms part of the Civil Parish of Roxby cum Risby and includes the Hamlet of Dragonby. St. Marys Church is a Grade 1 listed building of 12c origin with 14c additions and was restored and partly rebuilt in 1875.

A major landfill site is situated in Roxby but this will be detailed later.

Continue down North Street, passing The Old Hall on the right until a finger post on the left, heading north is reached. This is known locally as Roxby Trod leading directly to Winterton. The trod becomes Watery Lane and this is walked to its junction with Manlake Avenue.

For those wishing to visit Winterton cross the road and continue along Sowers Lane and at the right hand bend a footpath continues straight on to Earlsgate. A right turn here leads directly to High Street, the main shopping area.

Winterton has a history going back to Roman Times and several mosaic floors and other artefacts have been found. In October 1968, during road-widening works on the A1077, workers found a massive stone coffin containing a skeleton later identified as being that of a young woman aged between 20 and 25 years of age, who stood 5'3"(1.6 m) tall. She was of high status, as evidenced by the high quality of the coffin made from a single block of limestone and she was also found to be laid on a sheet of lead. Down the hill from this spot are the remains of one of the Winterton Roman Villas which is famous for its mosaic pavements where it is most likely she lived.

The Anglican Church here is dedicated to All Saints and the church tower and nave may have an Anglo-Saxon origin. The church went through a long restoration period between 1876 to 1890.

To return to the walk either retrace your steps or walk along Earlsgate to The A1077, turn left and continue to meet Cliff Avenue approaching from the left.

Turn left along Manlake Avenue and continue in a generally Westerly Direction where it soon becomes Cliff Avenue which followed to the end and its junction with the A1077. Those who visit Winterton will meet at this point. Cross the A1077, turn left and walk to the end of the houses to find a finger post pointing West Take this grassy track and follow to reach the field end. Here the route turns South – West diagonally across and down a field which is crossed and drop down a small bank onto a grassy lane heading in a Westerly Direction. This Lane is on the boundary of old Iron Ore Workings and also of the Winterton and Roxby cum Risby Parishes. On the left an exceptionally deep Roxby Pit with water in the bottom. The grass lane runs into muddy road, this being the access road to the Pit on Left.

The Roxby Pits are part of the Appleby - Frodingham workings along this hillside once known as Sheffields Hill. Exploratory work was started all along the Hill from Bagmoor to West Halton, mainly by 6 ft diameter wells sunk, wherever possible through the full thickness of the ironstone bed. Sometimes the volume of water was too great to deal with as only hand pumps were available and many trial borings had to be abandoned before reaching the bottom of the bed. However these explorations proved the existence of the ore bed in good quality and thickness as far north as a few hundred yards beyond the Thealby –

Winterton Road, not quite up to Coleby Village. Beyond this point the bed lost its thickness rapidly, and deteriorated in quality very quickly.

The Roxby Pit, originally owned by the Sheepbridge Company was abandoned due to their belief of poor quality ore high in sulphur; and their inadequate equipment. When taken over by the Appleby – Frodinghan Company, with the installation of baring, ore raising and pumping machinery, and a new approach connection with the light railway, this Pit was opened out into a very good face, capable of high production and extension.

Continue downhill and follow the road which soon turns south along the bottom of the hill adjacent to the old railway and many old, water filled workings.

On the hillside on the left is large Landfill Site operated by Biffa. Note the large areas covered by polythene with numerous pipes showing gas collection from the landfill gas.

Keep on the road observing the pedestrian areas until the railway level crossing is reached and crossed. Follow the now farm road to Bagmoor Farm where the Normanby Riding School now has its headquarters. Here the road becomes metalled and veers to the right and continues to the B1430 passing part of the Normanby Hall Golf Club on the right and the Bagmoor Chicken Farm on the left. At the B1430 is the Southern Entrance to the Normanby Park Estate and opposite is LKAB Metals, who refine ores etc..

***Normanby Hall** is a classic English Mansion, located near the village of Burton-upon-Stather, 5 miles north of Scunthorpe.*

The present Hall was built in 1825–30 to the designs of Robert Smirke for Sir Robert Sheffield (1786–1862). The Sheffield family had lived on the site since 1539 and the family's titles include Dukes of Buckingham and Normanby and Sheffield Baronets. It replaced a previous 17th-century building.

John Sheffield became Duke of Buckingham and Normanby in 1703. He built a fine mansion in London called Buckingham House. His son, the second Duke sold the house to George III and it is now known as Buckingham Palace

The house was extended and altered to designs by Walter Brierley between 1906 and 1908.

The Sheffield family moved out of Normanby Hall in 1963. The Hall is now in the care of the North Lincolnshire Council. The former 350 acre (1.4 km²) estate around the Hall is now a Country Park. Within it, there are a restored working Victorian Walled Garden, a farming museum, a stableyard, duck ponds, a deer sanctuary, a fishing lake, a miniature railway and broadleaf woodland.

Samantha Cameron, wife of the Conservative Prime Minister, David Cameron and elder daughter of the eighth Baronet, grew up on the estate.

Cross the B1430, turn left and follow the footpath crossing Lodge Lane, leading to Flixborough Village, to a roundabout leading to an Industrial Estate. Cross this and the footpath, heading south deviates from the road down to a disused waterfilled Pit. Follow this path with the Pit on the right until it reemerges next to the B1430 and continues to another roundabout. Turn right here down Lysaghts Way. Pass a small road to the right and a large lorry park on the right to reach another roundabout with Bloom Way exiting North on the right. Cross Bloom Way continuing on Lysaghts Way to yet another roundabout where Park

Farm Road and Moat Road are met. Turn right for a few yards and then cross Moat Road to reach a waymarker and a tarmac footpath following the perimeter of the Foxhills Industrial Park, previously the site of the John Lysaghts and latterly the Normanby Park Steelworks of British Steel.

John Lysaghts was the last major integrated Iron and Steelworks to be built in Scunthorpe. In 1906 the Company selected Scunthorpe as the site for a new blast furnace plant and rolling mills, because of its abundant ore reserves, from which to produce sheet bars for the company's works at Newport. In 1912 the plant was opened to the north of Scunthorpe away from the main concentrations of iron works and existing quarries. The works consisted of ironstone mines, 96 Semet Solvay coke ovens, with an output capacity of 3,000 tons of coke per week, two blast furnaces of 700 tons per week capacity, four forty-five-ton basic open-hearth steel furnaces, and a 400-ton metal mixer, with steel rolling mills. In 1913 A third blast furnace was put into operation .

Follow the path downhill to a wood, the Foxhills Plantation, which eventually approaches a small retail estate on the right and then the Scunthorpe Orbital Road, A1077 which is crossed at the traffic lights. Continue South through a broad expanse of grassland at the bottom of the escarpment with many tracks going in all directions, but stick to the main, obvious one, passing a housing estate on the right.

In a shortwhile the Atkinsons Warren Car Park is reached. This is the end of the Walk. For those who joined the walk at intermediate points and wish to continue, revert to the start of this description.