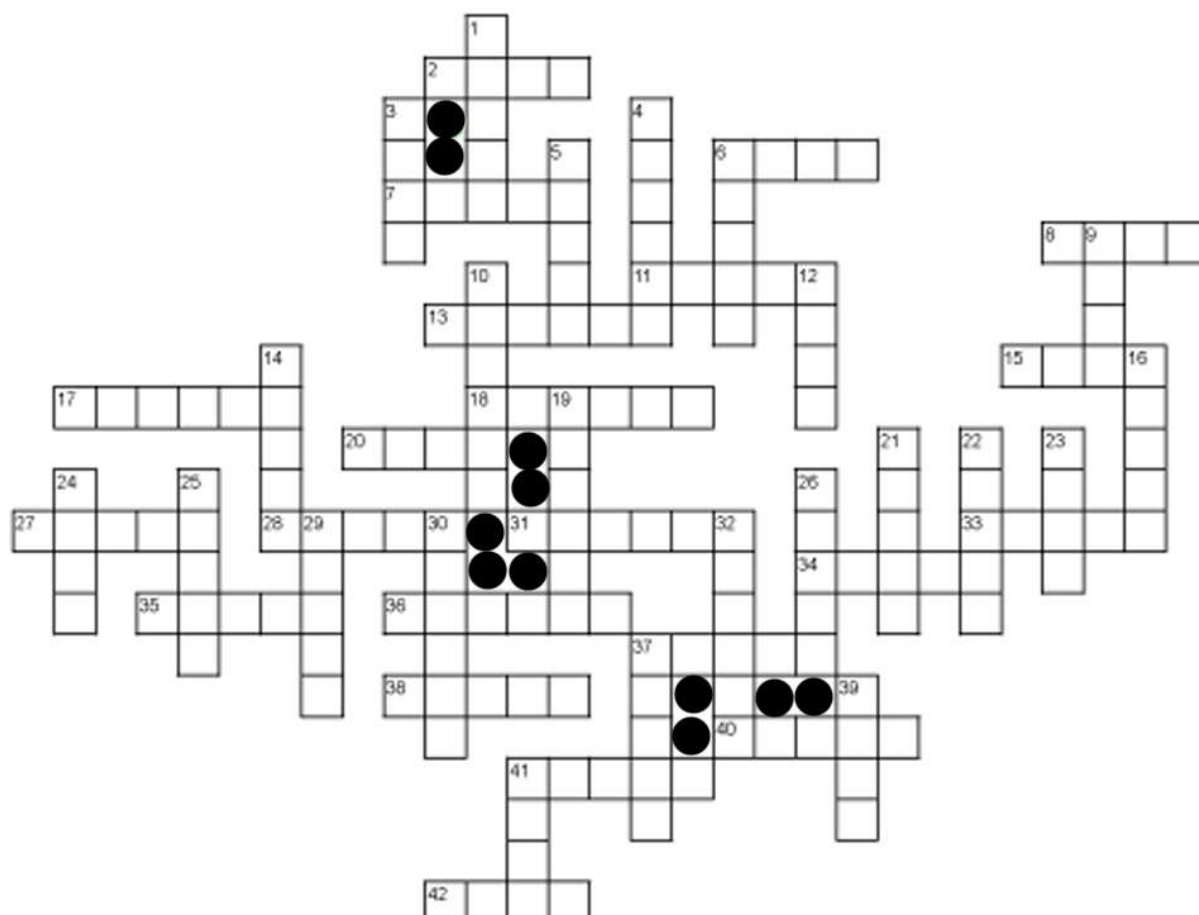


Ecclesall Woods Geocross V42 Revision A 20 Feb 2021

No contact geocaching and crossword

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To solve this crossword puzzle you need to visit the 15 locations of the main feature in the following photographs.

You will need the what3words app (W3W) on your GPS device. Using your GPS device held over the main feature you then get the what3words address. You will probably have to move around to find the W3W square containing the 'word' provided.

Save all the words and eventually fit the words to the crossword grid.

There are just three crossword clues. Find these words first, then fit all the other words to the grid. There may be more than one solution.

Clues

4 DOWN light rain

34 ACROSS precise

41 ACROSS single finger

The GPS on mobile phones can be imprecise. This can mean that multiple devices very close to each other might show different 3 word addresses, not because the 3 word addresses of your actual location is different but because the devices each think they are in slightly different places. Each location is a grid square 3x3 metres.

In order to help you ensure that you obtain the correct three word (W3W) address, the first word in the W3W is provided as a clue. You may need to walk around the main feature into different 3 x 3 metre grid squares to find the correct W3W address.

E.g. Let's assume that you are at a location given by the W3W address thick.verge.commented and you are told the first word of the W3W address is the word "thick". You now know you have found the right one.

Location	OS grid reference	W3W		
		First word	Second word	Third word
1	SK 32441 82473	dame		
2	SK 32401 82620	guards		
3	SK 32237 83278	cliff		
4	SK 32462 83372	loud		
5	SK 32532 83337	over		
6	SK 32701 83176	chop		
7	SK 32641 83140	salad		
8	SK 32113 82438	await		
9	SK 31825 82352	vent		
10	SK 31593 82359	tides		
11	SK 31177 82590	shield		
12	SK 31532 81924	best		
13	SK 31795 81761	lists		
14	SK 31741 81958	guides		
15	SK 31816 81977	exact		

Each of the locations can be found on the route below. The locations are listed in order and sufficient background is included to help you triangulate your position to identify the location.

Because these locations are within a wood their GPS positions are liable to be inaccurate. It is easier to use the photograph to locate the feature than to rely on grid references.



Start on Abbey Lane.

Location 1 OS ref SK 32441 82473 (may be inaccurate due to trees)

Collier's Pond

Contains "dame"



Ecclesall Woods covers 140 hectares.

Over the past two centuries it was extensively mined for coal and gannister, and the remains of this industry are evident throughout the woods. Many of the small streams and ditches were dug to keep the workings dry.

This pond was a gannister quarry, worked until 1910. The gannister was carried to Abbey Lane by a horse drawn tramway and taken to a refractory clay brick works, probably the Dyson Works at Totley. Refractory bricks have a high silica content and are used to line furnaces, very important for Sheffield's steel industry.

Gannister is the fossil soil layer which underlies coal. It was the clay soil where the prehistoric forest trees and ferns set their roots. Over thousands of years the organic remains of collapsed trees formed a layer of organic material which became a coal bed. Gannister is also called 'seat earth' and a coal miner would know that when he reached the seat earth there was no more coal below. This hollow filled with water and became an unsightly pond until 2008 when the Friends of Ecclesall Woods and Sheffield City Council undertook a major tidy-up project.

Today there is much more dead wood left decaying in Ecclesall Woods than ever in its history, either as standing dead trees or lying on the woodland floor. Timber is no longer collected and used as a fuel. Leaving dead wood to decay is a more natural way of managing the woods for biodiversity.

Location 2 OS ref SK 32401 82620 (may be inaccurate due to trees)

Colliers Grave

Contains "guards"



The Colliers Grave is for a Wood Collier George Yardley who was burned to death in his cabin here in 1786. He was a charcoal burner (wood coal) and would have been sleeping close to his burn, and failed to wake up when the fire spread out of control. He had spent the previous evening drinking with four of his friends and no doubt was sleeping heavily when disaster struck. His friends are named on the gravestone, which they paid for.

The woods were a busy and noisy industrial site in those days. As well as the mining operations and the corn and grinding mills, there would be a continuous traffic of horse, donkeys and carts clattering along the tracks.

Location 3 OS ref SK 32237 83278 (may be inaccurate due to trees)

Coppicing and Woodland Management sign

Contains "cliff"



This part of the woods is known as Stumpe Wood. It was a coppice woodland or 'Spring' wood. Coppicing means cutting the tree back to a stump or stool every 25 years or so, and allowing fresh stems to 'spring' up to form the next crop.

Coppicing keeps the woodland healthy and long lived. The process of stumping rejuvenates the tree and a coppiced tree can grow for hundreds of years without needing replanting.

Good coppice species are Oak, Ash, Hornbeam, Beech, Sweet Chestnut, Willow and Hazel.

The woods were historically managed for charcoal and timber production. The cut timber would be used for fencing and joinery, but the majority was burnt in special pits to make charcoal. At one time there were more than 300 charcoal burning sites in the wood.

Today there are several areas of recent coppicing in the woods. The wood will be harvested but not for charcoal. Selected areas, mainly hazel coppices, are now managed to provide pliable 'green' wood for woodworking craft courses.

When there was no more need for charcoal, Sweet Chestnut, Beech, Hornbeam, Larch and other species were planted for timber.

The current management intention is to create a multi-aged woodland and better habitat for wildlife.

Location 4 OS ref SK 32462 83372 (may be inaccurate due to trees)

Hornbeam – right mutistem of two trees

Contains “loud”



Hornbeam trees are not common in Sheffield. They are native to southern England. In Ecclesall Woods they were planted as a timber crop. They look a bit like Beech trees with their smooth grey bark. Hornbeam grows better than beech in wet soil. They have a very long life span, up to 300 years. They are a good coppice species.

Location 5 OS ref SK 32532 83337 (may be inaccurate due to trees)

Welcome to Ecclesall Woods sign

Contains “over”



These signs greet visitors at most entrances to the woods. Many of these visitors are dog-walkers who live nearby. There are also lots of cyclists, runners and some horseriders.

Ecclesall Woods cover 140 hectares and is the largest Ancient Woodland in South Yorkshire. Human activity goes back to neolithic times over 4000 years ago. The Limb Brook at the south west edge was the historic boundary between the Kingdoms of Mercia and Northumbria in the Dark Ages, between 1500 to 1000 years ago. The woods were fenced in 1319 by Sir Ralph de Ecclesall, thereby excluding the common people from his deer park. The now private woodlands were managed as 'coppice with standards' with large areas of open space for hunting. Between 1600 – 1800 they were subdivided into 27 compartments and let out for rental. When industry in Sheffield began to expand from 1800 on, these private tenants turned their hands to charcoal manufacture, mining and lead smelting.

Today there are three woods separated by roads, and wildlife and people can move freely throughout. But they have to be careful crossing wide and busy Abbey Lane which has a 40mph limit. There are 15 km of footpaths and bridleways, and people can walk off the paths as they wish, except within the fenced off 'Bird Sanctuary'.

Today Ecclesall Woods are the 'crown jewel' within Sheffield Parks, much loved by the nearby community. The Friends of Ecclesall Woods (FEW) were founded in 1993 to Investigate, Protect and Preserve this precious wood. A weekly volunteer group works with the woodland managers and rangers to maintain the woods. Tasks include repairing footpaths and fences, coppicing, removing invasive species and litter picking.

Location 6 OS ref SK 32701 83176 (may be inaccurate due to trees)

Bridge and grating

Contains “chop”



There are two main watercourses which pass through the woods. This is a substantial stream which flows along the north-east edge of the wood. It arises from a spring near Castle Dyke so it might be called Castle Dyke Brook.

The other stream is the Limb Brook on the south-west edge, which arises from the moors above Ringinglow.

Both join the River Sheaf and pass through the Megatron (a gigantic clean water sewer tunnel) under Sheffield City Centre to join the River Don.

Location 7 OS ref SK 32641 83140 (may be inaccurate due to trees)

Cup and Ring marked stone

Contains "salad"



Unknown, or perhaps just forgotten, until re-found in 1981, this gritstone carving is set in the bedrock. It was made a Listed Monument in 1998. This is a form of prehistoric rock art found elsewhere on natural rock outcrops in upland Britain. The 'cup and ring' are chipped out hollows. They date from the Late Neolithic through to the Bronze Age, so between 5000 – 2500 years old. Their purpose is not known; they may be sacred symbols.

Location 8 OS ref SK 32113 82438 (may be inaccurate due to trees)

Sweet Chestnut

Contains "await"



Sweet Chestnut is not a native tree. This species is found throughout the wood and was probably planted for timber. It is a good coppicing species and used to make 'chestnut paling' for fences. The young branch timbers are straight and easily split into palings. The spiralling deeply incised bark is unique to *Castanea sativa*.

Location 9 OS ref SK 31825 82352 (may be inaccurate due to trees)

Donkey Field Pond

Contains “vent”



A wildlife pond. Sadly it became contaminated by the invasive New Zealand pigmyweed (*Crassula helmsii*) which is almost impossible to eliminate, so it has been fenced off to reduce the spread of the weed.

Location 10 OS ref SK 31593 82359 (may be inaccurate due to trees)

Stone rails packhorse trail

Contains “tides”



unken tracks were built in the 18th C to provide better paths for packhorse trains. Prior to that, the tracks in the woods would have been very muddy; almost impassable at times.

The central dished part was packed with rammed stones to give the packhorses or mules good traction. They were known as 'Stone Rails'. The 'jaggers' who drove the packhorse trains were paid to move goods from place to place. In this case grain to and from the corn mills, and the products of charcoal, gannister and coal mining.

The packhorses were a small bred German cavalry horse called Jaeger, hence the anglicised jagger.

On 20 February 2021 Sheffield Star Newspaper used a photograph on one of these packhorse trails to head up a feature about Heritage.

Location 11 OS ref SK 31177 82590 (may be inaccurate due to trees)

Whirlow Mill

Contains "shield"



Collapsing ruins of the former Whirlow Corn Mill. It was fed by a conduit from the pond above Whirlow old bridge.

Location 12 OS ref SK 31532 81924 (may be inaccurate due to trees)

Ryecroft Mill

Contains “best”



All that remains of the 1655 Ryecroft Corn Mill is the rear wall of the wheel pit. It was an important mill supplying Abbeydale, Dore and Totley villages. It was approached on a well made track which crosses the Ryecroft Brook over a Grade II Listed 18th C arched bridge with substantial gate pillars. Flags were laid on the stream bed below the bridge to protect the walls from erosion.

Around 1850 the mill was used to blow air into lead smelting to cool the process.

After 1872 the mill was closed.

Location 13 OS ref SK 31795 81761 (may be inaccurate due to trees)

Ochre pollution spring

Contains "lists"



This is the outfall from Dore coal mine. Ochre pollution is commonly found where coal mining has caused a spring to come into contact with iron ore deposits.

Location 14 OS ref SK 31741 81958 (may be inaccurate due to trees)

Q-Pit sign

Contains “guides”



One of the 300+ charcoal burning Q-pits have been found throughout Ecclesall Woods. The second picture shows a pair of deeper Q-pits at W3W polite.hotels.sand

Wood was cut in winter and stacked to dry in a pit 4 metres in diameter and 2 to 3 metres deep. The 'stroke' of the Q refers to a hollow left in the lip of the pit, usually aligned south-west to use the prevailing wind to drive the flames at the beginning of the burn.

When ready for a burn the wood was covered with turfs to seal it from oxygen, leaving an open flue at the top and the Q stroke open. Once lit these holes were also sealed. It could take up to 10 days to complete a burn and the charcoal maker had to be on hand 24 hours a day to seal any gaps, and dampen down hot spots.

The resulting 'white charcoal' was used to smelt iron, and also lead ore which was brought into Ecclesall Woods from lead mines in the White Peak in Derbyshire. White charcoal was preferred to black charcoal as it gave less heat, and didn't contaminate the molten lead.

Location 15 OS ref SK 31816 81977 (may be inaccurate due to trees)

Mining sign

Contains "exact"



It is hard to imagine a woodland as a 'mine' these days. But the mining years were the most significant period of landscape change over several thousand years history of Ecclesall Woods.

Coal and gannister were needed by Sheffield's industries. The coal was shallow and easily reached from the surface by bell pit mines. These were small operations by one or two men, but there were a lot of them. Over a two hundred year period they changed the underlying landscape of Ecclesall Woods.