



PastSearch Newsletter



Issue 76: April 2019

Welcome to PastSearch Newsletter

You can find a downloadable version at www.pastsearch-archaeo-history.co.uk

Contents

March Round Up.....	1
Snippets from Navigable Rivers, Canals, and Railways of Great Britain.....	2
Artefact Corner.....	4
Book Review.....	4
First Friction Match Sold by John Walker.....	5
This Month in History.....	7
British Monarchs	8
HOSM Local History Society.....	8
Picture This.....	9
Just For Fun.....	9
Dates for Your Diary.....	10
Just for Fun Answers.....	10
What's Been in the News.....	11
Adverts.....	12

March Round Up



The site in Everingham was completed, and the new wall has been built, with the date stone repositioned.



and trial trenches on a site in Brough were dug, groups of stones were encountered, only one course survives, therefore difficult to determine if base of wall foundation, or simply demarcating an area.

One other site which was expected to begin in March has been postponed until April.

Historical Account of Navigable River, Canals and Railways of Great Britain

ARUN RIVER NAVIGATION

25 George III. Cap. 100, Royal Assent 13th May, 1785.

The River Arun has its source on the eastern side of the High Downs, called Hind Head, a range of mountains, having an elevation of 923 feet above the sea, at low water, and at short distance north of the town of Haslemere, in the county of Surrey; when, after taking an easterly course for some miles, it enters Sussex at Aldford: hence it takes a southerly direction to New Bridge,, near Billinghamurst, where this navigation commences. In its course from Aldfold, to the last mentioned place, it is crossed several times by the Wey and Arun Canal. From New Bridge, a canal four miles and a half long has been cut, in parallel course with the Arun, on its western bank, to near Haresford, where it crosses to the east side, and continues in that course to Pallenham Wharf, when the river becomes navigable.

From this place it pursues a southerly direction of two miles and three quarters, to Stopham, where the Rother, also a navigable river, falls into it: hence, taking a circuitous route, by Pulborough and Greatham, it reaches Greatham Bridge, to which place a canal, one mile and three quarters long, has been cut, in nearly a direct line, from the junction to the Rother. By this canal, the circuitous course, above described, is avoided, and five miles saved in the distance between Stopham and Greatham Bridge. From the latter place, the river makes several considerable bends to Houghton Bridge, (a distance of four miles from the end of the canal), where this navigation, made under the powers of an act, passed in the 25th of George III. entitled, '*An Act for amending and improving the Navigation of the River Arun, from Houghton Bridge, in the parish of Houghton, in the county of Sussex, to Pallenham Wharf, in the parish of Wisborough Green, in the said county; and for continuing and extending the Navigation of the said River Arun, from the said Wharf, called Pallenham Wharf, to a certain Bridge, called New Bridge, situate in the parishes of Pulborough and Wisborough Green, in the said county of Sussex,*' ceases.

The length of the river and cuts, belonging to this navigation, is thirteen miles; but to the sea, at Arundel Port, it is twenty-six miles and a quarter. The lower portion of this, however, is made navigable under other powers, and with different provisions, which will be described under the head of Arun River.

The Subscribers to this work, thirty-one in number, were incorporated as "The Company of Proprietors of the River of Arun Navigation," within the limits pointed out in the language of the title of the act before recited, and were authorised to raise amongst themselves, for carrying into execution the said act, the sum of £10,000, by one hundred shares of £100 each, which shares are personal estate.

This canal is navigable for vessels drawing 3 feet 1 inch water, and the following rates of tonnage are allowed:-

TONNAGE RATES

	s.	d.	
For Timber, Planks, Coal, Lime, Corn, Grain and all other Goods, Wares or Merchendize whatsoever (except Firewood, Chalk, Soil and Dung) from Houghton Bridge To Pallenham Wharf.....	0	9	per Ton.
Firewood, Chalk, Soil and Dung.....	0	6	ditto.
For same Articles (with the exception as above) passing between Pallenham Wharf and the End of the Navigation at New Bridge.....	2	3	ditto.
The excepted Articles as above.....	0	6	ditto.
For every Light Barge passing through all or any of the Locks.....	1	0	ditto.

In cluse 14, a novel mode is resorted to for preventing impositions, in regard to the quantity conveyed along this navigation; for it is there enacted, that all boatmen, &c. Navigating this river, between Arundel Port and Pallenham Wharf, shall receive, for freight, including dues or rates, as follows:-

	s.	d.	
For coals.....	3	6	per Chaldron.
Timber, Planks, Lime, Corn, Grain, Firewood and all other Goods,	3	6	per Ton.
Wares and Merchandize.....			
Chalk, Soil and Dung, from Houghton Talk Pits.....	13	0	per Barge Load of Eight Tons.

And so in proportion fro every Ton of Chalk, Soil and Dung.

A Penalty of £5 is recoverable from any Bargeman before a Justice of the Peace, should he claim any higher Sum than above specified.

No Tolls to be taken for Vessels navigating the Old River Arun between Greathan and Stopham Bridges.

Sea Gravel, brought to repair any of the Roads leading in the direction of the New Bridge Wharf, to be exempted from Tolls, excepting the Sum of One Shilling per Barge for any of the Locks upon the Navigation.

The affairs of this navigation are managed by a committee of three proprietors, subject to the control of a general assembly of proprietors, held twice a year.

The proprietors have a power, by public auction, to let or demise the rates and dues for any term not exceeding two years.

The original, and chief, object of this navigation was the supply of coal and fuel to the interior, and for the export of agricultural produce; but by the execution of the Wey and Arun Canal, which falls into the Wey, (and thence to the Thames), a direct communication is made with London, and when the Portsmouth and Arundel Canal is completed, a large additional revenue will doubtless be added to this concern, by the receipt of tolls upon marine stores, which, in time of war, may be safely transmitted from the Metropolis, by this conveyance, to the depot at Portsmouth.

Navigable Rivers, Canals, and Railways of Great Britain, J. Priestley 1831



References used:

<https://www.waterwayroutes.co.uk/blog/2017/03/wey-arun-canal-free-canal-maps/>

Artefact Corner

BURDALL'S MFG CHEMIST SHEFFIELD:



This bottle was collected from the topsoil of a site in Hayton in 2013.

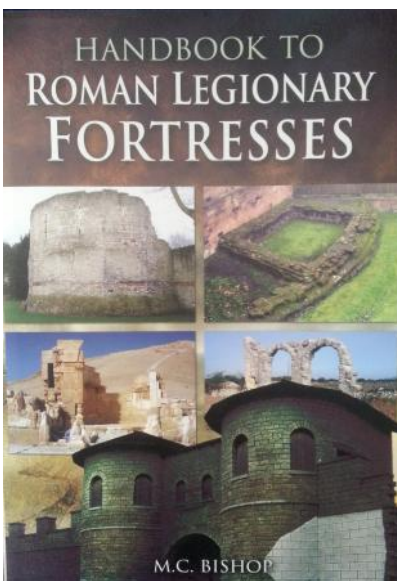
Burdall's bought the former complex of Hillsborough Barracks in October 1932. Run by Herbert Moses Burdall, with his son Herbert Alonzo Burdall, they moved to this new site after a fire at the Gibraltar Street works. The barrack site was so large that they let out some parts to other companies.

Herbert Moses Burdall was born in Lincolnshire in 1857, and was a dry salter – making of dyes, varnish, wallpaper paste, paint soap and glue. From 1932 to the 1940's he represented Hallam on the council. Herbert Alonzo Burdall continued the business, after his father's death, until 1976, when the company closed.

Their best known product was gravy salts, although it contained no gravy, it was a mix of caramel and salt. They also produced Syrup of Squills (sea hyacinths) – a cough medicine; carbolic tooth powder; rheumatic salts, chilblain ointments; eczema and dermatitis paste; fuller's earth ointment; Glauber's salts; soapless shampoo powder; hair cream; suntan oil; perfume; carbonate of magnesia; Dr Hugh Maclean stomach powders and Castorvims chocolate laxative, to name but a few products.

Book Review

Handbook to Roman Legionary Fortresses – M. C. Bishop:



This reference book takes a look at a number of identified Roman legionary fortresses throughout the former Roman Empire, including 11 in the UK.

There some excellent diagrams showing the layout of these fortresses and comparing between each one, and describing the different types of buildings traditionally found at fortresses. Also a number of colour photographs from some of the sites.

First Friction Match Sold by John Walker

The use of matches for lighting fires etc is relatively modern, prior to this rubbing sticks together of creating sparks from a flint were the methods used.

Although a note in the text Wu Lin Chiu Shih, dated from 1270 AD, lists sulfur matches as something that was sold in the markets of Hangzhou, China around the time of Marco Polo's visit. The matches were known as fa chu or tshui erh.



The western invention process began in 1669 with Hennig Brand, a Hamburg alchemist, who discovered phosphorous whilst trying to turn base metals into gold. He had allowed a vat of urine to stand until it purified, then boiled the liquid to a paste, this he heated to a high temperature, hoping the vapours would be drawn into water and condensed into gold – that was not the result, instead he had a waxy white substance which glowed in the dark – phosphorous.

Brand sold his discovery to a German chemist, Krafft, who exhibited phosphorus throughout Europe. When word was leaked out that the substance was made from urine, others were able to create their own phosphorous easily, including Johann Kunckel in 1678.



In 1680 Sir Robert Boyle coated a piece of paper with phosphorus, with a separate splinter of sulfur-coated wood. When the wood was drawn through the paper, it would burst into flame. This was experiment was only an experiment, and was not developed further.

Therefore it is not until 1827 that we can attribute the invention of the friction match to John Walker. He had studied at Durham and York, and was interested in trying to find a way of producing fire easily. Several chemical mixtures were known at this time which would ignite by a sudden explosion, but it had not been found possible to transfer the flame to a slow-burning substance like wood.

As with many great inventions Walker's discovery happened by accident. He was preparing a lighting mixture on one occasion, and a match which had been dipped in it took fire by an accidental friction upon the hearth. He at once appreciated the practical value of the discovery, and started making friction matches. They consisted of wooden splints or sticks of cardboard coated with sulphur and tipped with a mixture of sulphide of antimony, chlorate of potash and gum.



Walker's sales-books contain an account of 250 sales of friction matches, the first entry made on 7 April 1827.

A box of 50 matches was one shilling, which was supplied with a piece of sandpaper, folded double, through which the match had to be drawn to ignite it. He named the matches "*Congreves*" in honour of the inventor and rocket pioneer, Sir William Congreve.



Sir Isaac Holden was also developing his version of the match, but his discovery happened in October 1829, although encouraged by others, he did not patent his invention, making it freely available for anyone else to produce and sell. He claimed that one of his pupils wrote to his father Samuel Jones, a chemist in London who commercialised the process. A version of Holden's match was patented by Samuel Jones, and these were sold as Lucifer matches.

These early matches had a number of problems - an initial violent reaction, an unsteady flame and unpleasant odor and fumes. Lucifers could ignite explosively, sometimes throwing sparks a considerable distance.



Lucifers were produced in the United States by Ezekial Byam, however, they this type of match as quickly replaced by the process developed by French chemist, Charles Sauria, who invented the first phosphorus-based match by replacing the antimony sulfide in Walker's matches with white phosphorus.

The earliest American patent for the phosphorus friction match was granted in 1836 to Alonzo Dwight Phillips of Springfield, Massachusetts.

In 1843 William Ashgard replaced the sulfur with beeswax, reducing the pungency of the fumes. This was replaced by paraffin in 1862 by Charles W. Smith, resulting in what were called "parlor matches". From 1870 the end of the splint was fireproofed by impregnation with fire-retardant chemicals such as alum, sodium silicate, and other salts.

Finland prohibited the use of white phosphorus in 1872, followed by Denmark in 1874, France in 1897, Switzerland in 1898, and the Netherlands in 1901. The UK passed a law in 1908 prohibiting its use in matches after 31 December 1910.

The term "lucifer" continued as slang into the 20th century (as in the song Pack Up Your Troubles - WWI) and matches are still called lucifers in Dutch.

References Used:

[https://en.wikipedia.org/wiki/John_Walker_\(inventor\)](https://en.wikipedia.org/wiki/John_Walker_(inventor))
<http://inventors.about.com/library/inventors/blmatch.htm>
<http://www.historyofmatches.com/matches-inventors/john-walker/>
https://en.wikipedia.org/wiki/Hennig_Brand
https://en.wikipedia.org/wiki/Robert_Boyle

This Month in History (April)

Below, is at least one event for each day of this month from around the world.

Links for more information about each of these events can be found by visiting the relevant page on the *PastSearch* website.

You can also find out about other events which have happened in history for each day of the year.

Start your search by using this link: <http://pastsearch-archaeo-history.co.uk/on-this-day/>

Date	Year	Country	Event
1	1854	UK	First part of Charles Dicken's 'Hard Times' published in 'Household Words'.
2	1847	China	Expedition to Canton began.
3	1559	Italy/France	Italian War ended with signing of Peace of Cateau-Cambr�sis.
4	1812	USA	President James Madison enacted a 90 day embargo on trade with UK.
5	1900	Crete	Clay tablet with Linear B script discovered at Knossos.
6	1909	North Pole	Reached by Robert Peary and Matthew Henson.
7	1724	Germany	JS Bach's 'St. John Passion', BWV 245 premiered at St. Nicholas Church, Leipzig.
8	1886	UK	First Irish Home Rule Bill introduced into House of Commons.
9	1454	Italy	Treaty of Lodi signed.
10	1972	UK, USSR, USA	Biological Weapons Convention signed.
11	1996	Israel	Operation Grapes of Wrath began (South Lebanon Conflict).
12	1587	Spain, Algarve Etc	Singeing the King of Spain's Beard began.
13	1912	UK	The Royal Flying Corp established.
14	43BC	Roman Republic	Battle of Forum Gallorum.
15	1755	Great Britain	Samuel Johnson's 'Dictionary of the English Language' published in London.
16	1847	New Zealand	Wanganui Campaign began (New Zealand land wars).
17	2013	USA	Explosion at West Fertilizer Company, 15 killed.
18	796	Northumbria	�thelred I murdered at Corbridge, Osbold became King.
19	1775	America	American Revolutionary War began.
20	1964	UK	Fire at Battersea Power Station.
21	1782	Siam	Rattanakosin founded.
22	1912	Russian Empire	Pravda first published in St. Petersburg.
23	1922	Monaco	Second Women's Olympiad ended.
24	2006	Nepal	King Gyanendra restored parliament.
25	1607	Gibraltar	Battle of Gibraltar (Eighty Years' War).
26	1662	YORK	Royal charter issued to Incorporation of the Company of Merchant Taylors of the City of York.
27	1942	UK	Baedeker Blitz – German bombers hit Norwich (1 st time) (WWII).
28	1611	Philippines	University of Santo Thomas established.
29	1386	Belarus	Battle of Vikhra River.
30	1517	England	Evil May Day riot in London began.

British Monarchs – Henry III



Name: King Henry III

Born: October 1, 1207 at Winchester

Parents: King John and Isabella of Angouleme

House of: Plantagenet

Ascended to the throne: October 18, 1216 aged 9 years

Crowned: October 28, 1216 at Gloucester and May 17, 1220 at Westminster Abbey

Married: Eleanor of Provence, Daughter of Raymond Berenger

Children: Six sons including Edward I, and three daughters

Died: November 16, 1272 at Westminster, aged 65 years, 1 month, and 16 days

Buried at: Westminster Abbey

Reigned for: 56 years, and 29 days

Succeeded by: his son Edward

Henry became king at the age of 9, during the First Barons' War. However, the royal powers were exercised by a regency until 1232, and by two French nobles, Peter des Roches and Peter des Rivaux, until the barons forced their expulsion in 1234, from this time Henry's personal rule began.

He extracted large sums of money from the Jews in England which crippled their ability to do business, and as attitudes towards the Jews hardened, he introduced the Statute of Jewry (1253) in an attempt to segregate the community, 'Jewish badges' also had to be worn, although it is uncertain to what extent this legislation was put into effect.

There was a Second Barons' War in 1264, a revolt of nobles led by his brother-in-law Simon de Montfort. Henry was defeated at Lewes, Sussex, and imprisoned, but restored to the throne after the royalist victory at Evesham in 1265.

References used:

<https://www.britroyals.com/kings.asp?id=henry3>

https://en.wikipedia.org/wiki/Henry_III_of_England

https://en.wikipedia.org/wiki/Statute_of_Jewry

HOSM Local History Society



Meetings are held on the 3rd Monday of each month at the Social Club, next door to the Village Hall, High Street.

Start time 7.00pm

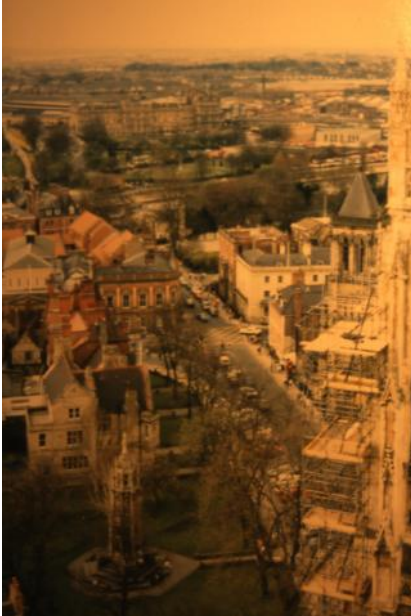
Price £2.00

2019

15 Apr – Richard III & the Middleham Jewel – *Kate Giles*

20 May – Markenfield Hall – *Janet Senior*

Picture This



Duncombe Place, York

This is a photograph, taken from York Minster in 1997. Scaffolding on one of the belfry towers

Where is this?



Answer in Issue 77

Just For Fun



This is Colin the digging hamster, he is hiding on one of the pages in this newsletter, can you find him?

Easter Word Search

N	J	J	E	S	U	S	K	L	B	N
Y	M	X	O	P	L	L	Q	R	O	S
A	A	B	C	T	E	D	U	E	N	V
D	F	W	G	X	N	H	Y	I	N	J
I	K	E	A	S	T	E	R	N	E	N
R	Y	G	A	Z	B	N	I	X	T	N
F	C	G	W	C	R	O	S	S	T	D
D	S	S	V	E	U	F	E	S	G	T
O	H	A	I	J	B	N	N	C	K	D
O	N	A	I	U	L	E	L	L	A	N
G	F	G	X	H	Y	T	Z	V	I	W

ALLELUIA

GOOD FRIDAY

BONNET

JESUS

CROSS

LENT

EASTER

RISEN

EGGS

Answers on page 10

Dates for Your Diary

15 Apr	HOSM Local History Society – Richard III & the Middleham Jewel – Kate Giles. 7pm	18 May	Southburn Archaeological Museum – Open Day. 10am-4pm
16 Apr	North Duffield History Society – “Alice Through the Looking Glass” – Jackie Reid	19 May	Archaeology Roadshow, hosted by Petuaria Revisited.
17 Apr	ERAS Lecture – Excavating Engels: 19 th C Industrial Housing in Manchester & Salford – Dr. Mike Nevell. Hull University, 7pm	20 May	HOSM Local History Society – Markenfield Hall – Janet Senior. 7pm

If you have an event you would like to include in Dates for Your Diary, please send details to Karen at pastsearch@hotmail.com

Just For Fun Answers



Find Colin on page 12

N	J	J	E	S	U	S	K	L	B	N
Y	M	X	O	P	L	L	Q	R	O	S
A	A	B	C	T	E	D	U	E	N	V
D	F	W	G	X	N	H	Y	I	N	J
I	K	E	A	S	T	E	R	N	E	N
R	Y	G	A	Z	B	N	I	X	T	N
F	C	G	W	C	R	O	S	S	T	D
D	S	S	V	E	U	F	E	S	G	T
O	H	A	I	J	B	N	N	C	K	D
O	N	A	I	U	L	E	L	L	A	N
G	F	G	X	H	Y	T	Z	V	I	W

What's Been in the News

These articles were shared on Facebook during the last month. To see similar articles as they come into the news follow PastSearch on Facebook.

Five of the most remarkable Neolithic, Iron Age and Tudor finds in Yorkshire in the last five years



“Some amazing discoveries have been made by archaeologists working in Yorkshire in recent years.

They include what could be East Yorkshire’s first Woodhenge and possible sauna, a beautiful gold armlet discovered in a farmer’s field and a “ritually speared” warrior.”

Read more at:

https://www.yorkshirepost.co.uk/news/five-of-the-most-remarkable-neolithic-iron-age-and-tudor-finds-in-yorkshire-in-the-last-five-years-1-9668389?fbclid=IwAR1-m5yt_NJnMbAIYUPGsFEI9RU84mjdSoijLDkkmVxLB1zXpnYfQWgXF0

Footprints of World's Largest Dinosaur Found in Scotland



“Dozens if giant footprints discovered on a Scottish island are helping shed light on an important period in dinosaur evolution.

The tracks were made some 170 million years ago, in a muddy, shallow lagoon in what is now the north-east coast of the Isle of Skye.”

Read more at:

https://www.geologyin.com/2018/04/footprints-of-worlds-largest-dinosaur.html?fbclid=IwAR3JixDt6RHKSfHtJt_TdcQG32q67t94GJz-Y_f6tg9mb-p1dMYhdH8MFEo

Humans couldn't pronounce 'f' and 'v' sounds before farming developed



“Human speech contains more than 2000 different sounds, from the ubiquitous “m” and “a” to the rare clicks of some southern African languages. But why are certain sounds more common than others? A ground-breaking, five-year investigation shows that diet-related changes in human bite led to new speech sounds that are now found in half the world’s languages.”

Read more at:

<https://www.newscientist.com/article/2196580-humans-couldnt-pronounce-f-and-v-sounds-before-farming-developed/>

Parts of York's original railway station unearthed by developers



“A unique piece of York’s railway heritage has been uncovered for the first time in decades. The old train turntable from the city’s first station has been unearthed by the construction crew working on the Hudson Quarter development on Toft Green.”

Read more at:

<https://www.yorkmix.com/life/parts-of-yorks-original-railway-station-unearthed-by-developers/?fbclid=IwAR0frnPK8KccuKdYZpnMBmiePR6h5tPFkcGss29E2mpBMsfIC3QzIMQy58I>

Visit the PastSearch Website

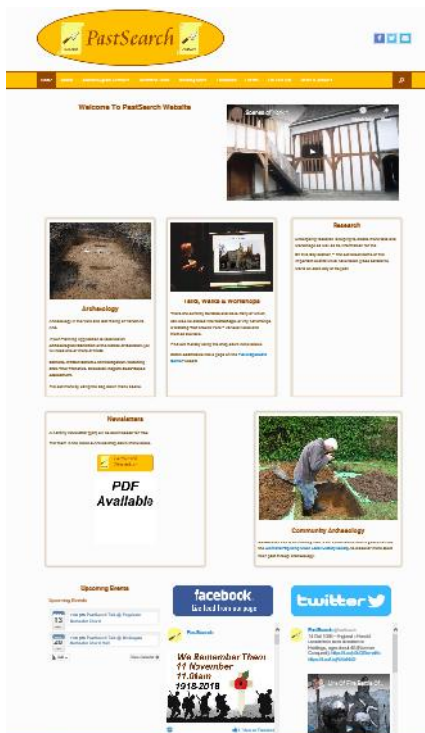
Have you visited the *PastSearch* Website?

Here you will find information on the archaeological services, talks and workshops available from *PastSearch*.

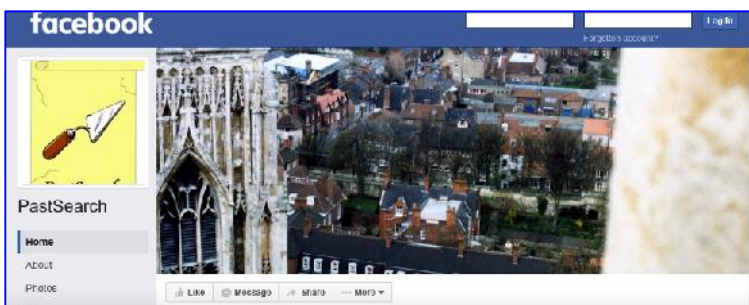
There are also reports, newsletters and other pdf files to download for free.

Go to <http://pastsearch-archaeo-history.co.uk/>

Or access on mobile phone by scanning



Follow PastSearch on Facebook and Twitter

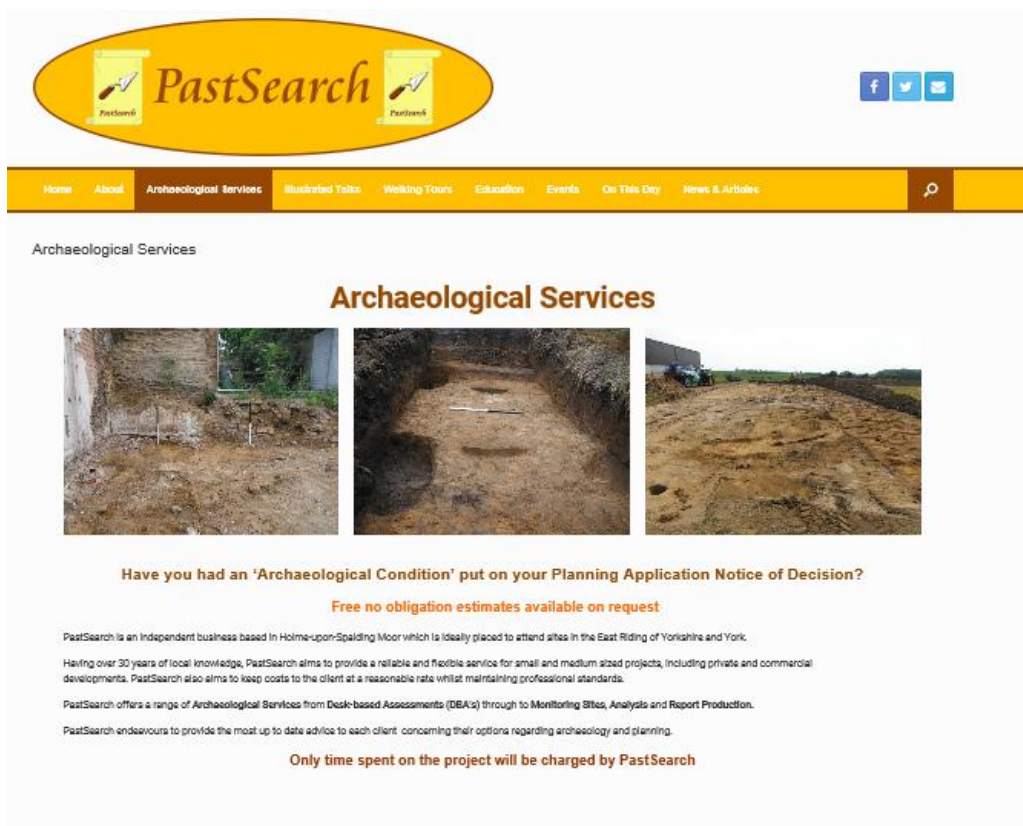


<https://www.facebook.com/PastSearch-109488651355/>



<https://twitter.com/PastSearch>

Archaeological Services



<http://pastsearch-archaeo-history.co.uk/archaeological-services/>

PastSearch offers archaeological services including Heritage Statements, Written Scheme of Investigations, Watching Briefs and Evaluations, working in the North Yorkshire and East Riding.

With 30 years of local knowledge, *PastSearch* aims to provide a reliable and flexible service regarding small and medium sized projects, including private and commercial developments. We also aim to keep costs to the client at a reasonable rate whilst maintaining professional standards.

CAD Illustration service also available.

For more information please email: archaeology-pastsearch@hotmail.co.uk
or ring **Karen** on 07811 877 469.

Presentations, Workshops and Walking Tours

<http://pastsearch-archaeo-history.co.uk/illustrated-talks/>

Archaeology Along the A63
Bottles
Castles of East Yorkshire
Clifford's Tower
Clues Above the Eyeline
Clues at Foot Level
Eboracum to York
Iron Age Settlements in E. York
Lendal Bridge
Life of an Archaeologist
Maps of E. Yorks
Moated Sites of E. Yorks
Petuarium to Brough
Roman York
Stratigraphy &
Archaeological Dating Methods
The Iron Age
The Medieval Period
The Normans
The Romans
The Vikings
Toys Found in Archaeology
Trials & Executions in York
Walk Around York Walls
Welham Bridge
York Historians
York Railway

19th C Blake Str
Asselby Area
Beverley Area
Coins
Fires of York Minster (in 3 Parts)
Market Weighton Area
Pocklington Area
Restoration of York City Walls
Viking York

New for 2019

The A1079 - York to Pocklington
The A1079 - Pocklington to
Market Weighton

The 1948 Plan for York
The Forest of Galtres

There are currently 39 illustrated talks available which can be booked by groups and societies, and the list keeps growing!!

Workshops are also available and can be adapted to suit your group's needs.

Alternatively if your group would like to explore areas of York on foot, tours can also be individually created.

For more information please email: pastsearch@hotmail.com
or ring **Karen** on 07811 877 469.