

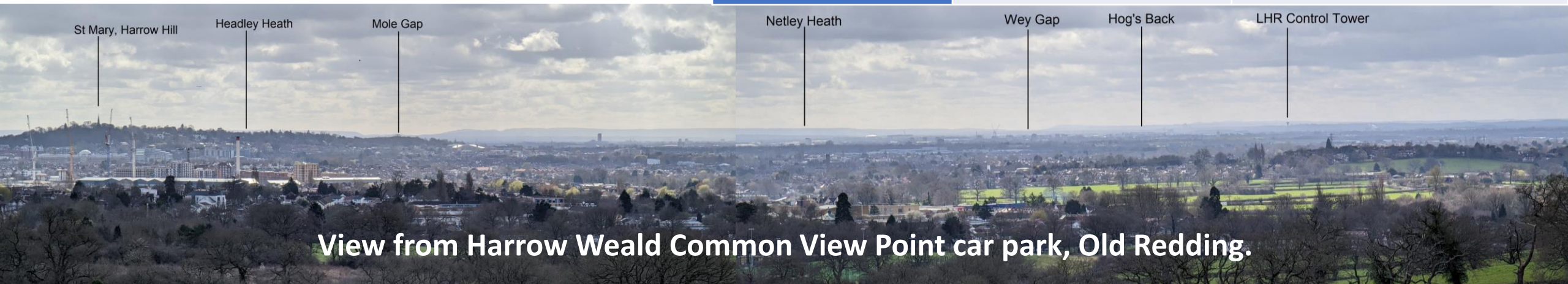


Harrow & Hillingdon Geological Society
1973 - 2023 Celebrating 50 years

Stanmore Gravel Project

Investigating the gravel in the vicinity of Harrow Weald geological SSSI

Project Aim	Specific Aim	Works needed
1. To provide a clear description of the gravel at the SSSI on Harrow Weald Common	Measure the thickness of the gravel at various locations to check depth	Identify locations where the deposit may remain relatively undisturbed. Site visits with trowels to remove topsoil. Use hand augur to collect samples digging into the surface vertically and/or horizontally
	Drill a small vertical borehole to find what lies beneath the gravel	Requires the use of a mechanical drill rig
2. To locate and examine an original in-situ deposit of Stanmore Gravel	Cut a vertical section through the gravel deposit to observe depositional features (ideally make use of an existing bank as this avoid the need to dig a pit down from a flat surface)	Minimum 1m x 1m Cut in steps each 1m deep Preferred width 2-3m Depth depends on the thickness of the deposit (believed to be 3m in this area) Requires the use of a mechanical digger or a team of strong people
3. To examine a sample of the gravel and conduct tests to analyse its content	Having found suitable sites considered to be at the original surface of the deposit and relatively undisturbed, remove samples for analysis	a) collect sacks of pebbles and do a clast analysis (pebble count) b) collect a small quantity of sandy matrix to conduct heavy mineral analysis, SEM surface grain analysis, microfossil analysis

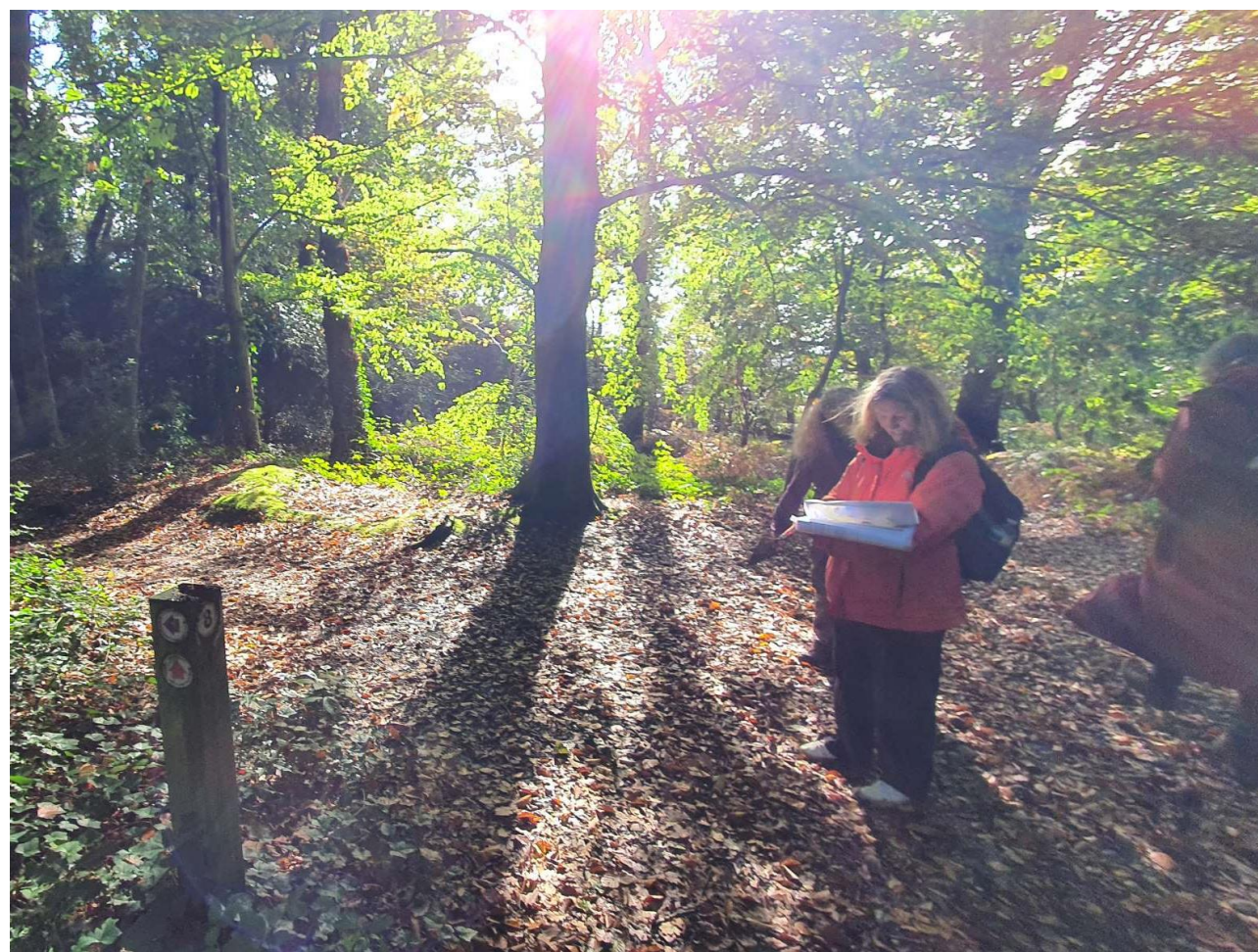


View from Harrow Weald Common View Point car park, Old Redding.

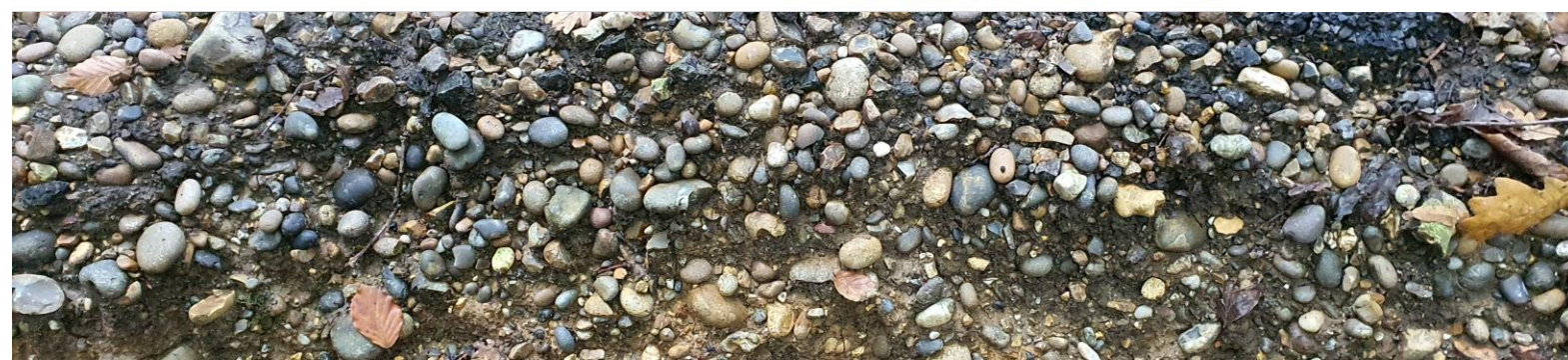
Harrow & Hillingdon
Geological Society
Field Trip to Harrow
Weald Common SSSI
and surrounding area
24th August 2022



Examples of the
large pebbles
found in the
Stanmore Gravel
deposit. Most
pebbles are less
than half the size
of these.



Diana Clements preparing the Harrow Weald Common geotrail
for her 2nd edition of "The Geology of London"



The entire Common is uneven and pitted
where gravel has been removed for
hundreds of years. Since 1899, Conservators
have been responsible for preventing the
removal of gravel.

LOCATION X

The bank connecting to the SSSI



We aim to expose and examine a vertical section of gravel.

LOCATION Y

Deep pit from flat surface



While waiting for permission to dig in the SSSI, we identified 2 locations on Harrow Weald Common near but just outside the SSSI where an original surface of gravel may remain.

We are grateful to Harrow Council and the Conservators of Harrow Weald Common for allowing us to proceed with this.

We also collected gravel from spoil heaps on the north of the Common following pond-digging and flood management measures.
May 8th 2023: Gravel of specific grain sizes were collected and stored for clast analysis (can only be indicative of Stanmore Gravel)



We are grateful to the warden and volunteers on the Common for supporting us that day.



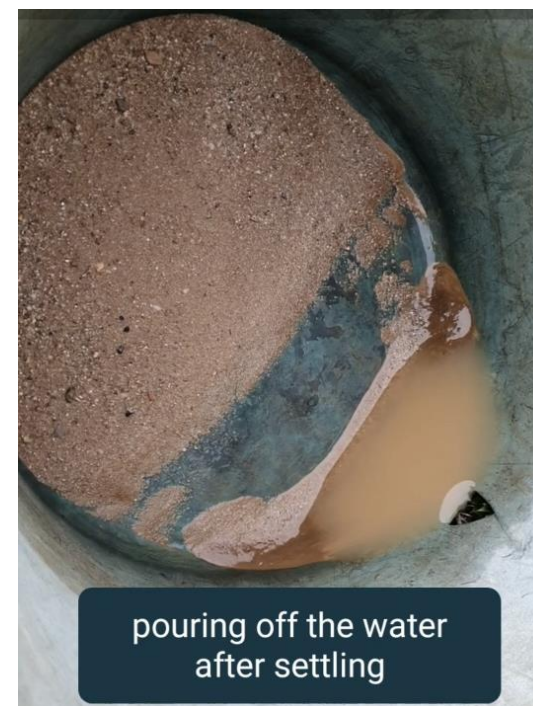


A small amount of gravel from the spoil heaps was washed and sorted for use in our exhibitions and has been shown at our Discovery Sessions at Brunel University. Two fragments of glass emerged during sorting showing a certain amount of recent contamination.

These spoil heap samples can only be taken as indicative of gravel content.







Display sample
from spoil heap,
8th May23



Large cobble collected
from same spoil heap





LOCATION Y

Near Old Redding London Loop entrance to HW Common [16]



Fence to garden centre. Former gravel or clay pit.
Top of bank is at the height of the road and footpath.



Base of pit: Gravel in tree root has sandy matrix



Top of ridge: Gravel has
clayey matrix



Mottled Clay
exposed in bank





LOCATION Y



When we removed the leaves we found large pebbles over the surface with clay immediately beneath. There was no gravel layer in this part of the bank. The clay is an intense orange colour with greenish-white mottling. The orange parts are more silty while the greenish-white parts seem to have a higher clay content. The clay pellets we took at depth from the auger were the greenish-white type.



Bucket auger was used to collect 7 samples from ~40cm to 76cm



Screw auger was used for the final sample from 76cms



[Collecting samples of Stanmore Gravel from Harrow Weald Common - YouTube](#)



There were 3 pebbles in the screw augur sample from below 76cm in the pale clay



Close-up of clay sample when dry. For use in public engagement events.



1p for scale

Bagged samples to be sent for analysis. The rest was returned to backfill the hole.



Harrow Weald Common
Conservators

This body was established by the Metropolitan Commons (Harrow Weald) Supplemental Act of Parliament on 20 June 1899 to "regulate and manage" the common. For over a hundred years the conservators have acted for the common, preserving, for the community, the delightful open space we find today.

Originally the Conservators were representatives of the Harrow, Wealdstone and Westley Urban District Councils, Harrow Weald and Three Parva Councils and the Hendon Rural District Council out of as these bodies were abolished Harrow Council took over the appointment of the conservators and financing of their work. The current board (2008) consists of five local councillors from Harrow Weald ward and elsewhere in Harrow. The Conservators are prohibited from receiving any remuneration by parliament.

The reason faced by the original Conservators were different to today. They prevented the removal of "fur" (sods, gravel, sand and other substances) prevented "hard casting" (on traps, lying areas and taking birds' eggs) and were responsible for the "suppression" of gardeners, card shops, vagrants, persons guilty of trespassing or any other or disorderly person". Breakers of the bye laws could face fines of 10 and 40 shillings per day for continuing breach.

Today's Conservators face different challenges. We seek to preserve the nature of the common, offering a natural environment providing a haven for wildlife and offering public access to the common in the last 20 years.

Operating on behalf of the Conservators, we hope you enjoy your time on the Common as much as we do.

Key Points:
Changing Harrow Weald Common Conservators October 2008

The map is reproduced from Conservators Survey meeting with the permission of Ordnance Survey on behalf of the conservators of Harrow's Common (Harrow Weald Common). Unauthorised reproduction is illegal. Ordnance Survey and may need to be consulted as to its presentation. London Borough of Harrow.

Harrow Weald Common
Nature Trail

3.75km (2.35 miles)

There are two sections to the nature trail. The orange route is shorter with more gentle gradients, ideal for those with limited mobility; the purple route is longer, with steps, slopes and generally less even terrain - both finish at the road opposite the viewpoint car park - enjoy!

English oak has rough bark, smooth leaves and acorns. It can grow to over 30m (98 ft) and can live for more than 1,000 years. More species of insects, birds and other animals are associated with the oak than any other native British tree.

The Hawthorn is a small, bushy tree with small, serrated leaves and white flowers. It is a common tree on the Common and is often used for hedging.

Beech is a tall, smooth-barked tree with smooth, serrated leaves and acorns. It is a common tree on the Common and is often used for hedging.

Mistletoe is a parasitic plant that grows on the branches of trees. It is a common plant on the Common and is often used for decoration.

The Common is a beautiful area with many different types of trees and plants. It is a great place to go for a walk and to enjoy the outdoors.

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LOCATION X

Gate to SSSI at [16]

SSSI perimeter fence runs from [15] to [16]

The top of this bank has a flat surface at this point on the SSSI side of the fence

Red water at [16]

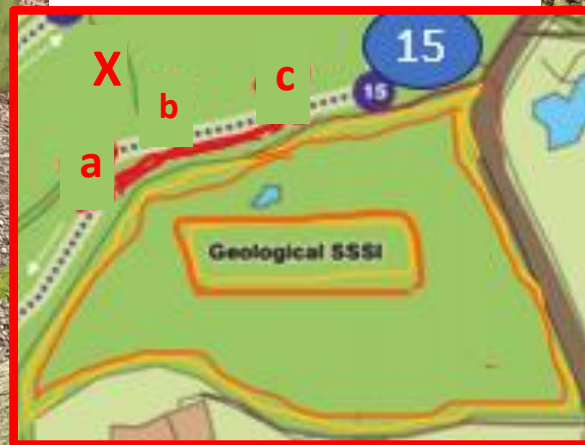
LOCATION X

6 September 2023

Xa

We examined the bank at 3 points (a,b,c) along the section at X. Height was from 2-3m. At the top of each was a flat surface inside the SSSI. Gravel was present on the Common side wherever the bank was exposed.

Xc



Xa, Xb and Xc could all be suitable sites for digging a section into the bank.



Xc

LOCATION Xb



Spoil from recent collapse



Collapsed bank reveals gravel

([see video](#))



At Xb, immediately to the left of the “waterfall” pipe, there has been a recent collapse of the top of the bank. We could see a nice exposure of apparently in situ gravel with some alignment of pebbles. It would be easy to remove the spoil and dig a section by hand, approx. 3m deep to ground level. This will be done as soon as possible.



The Waterfall Pipe, Oct '23

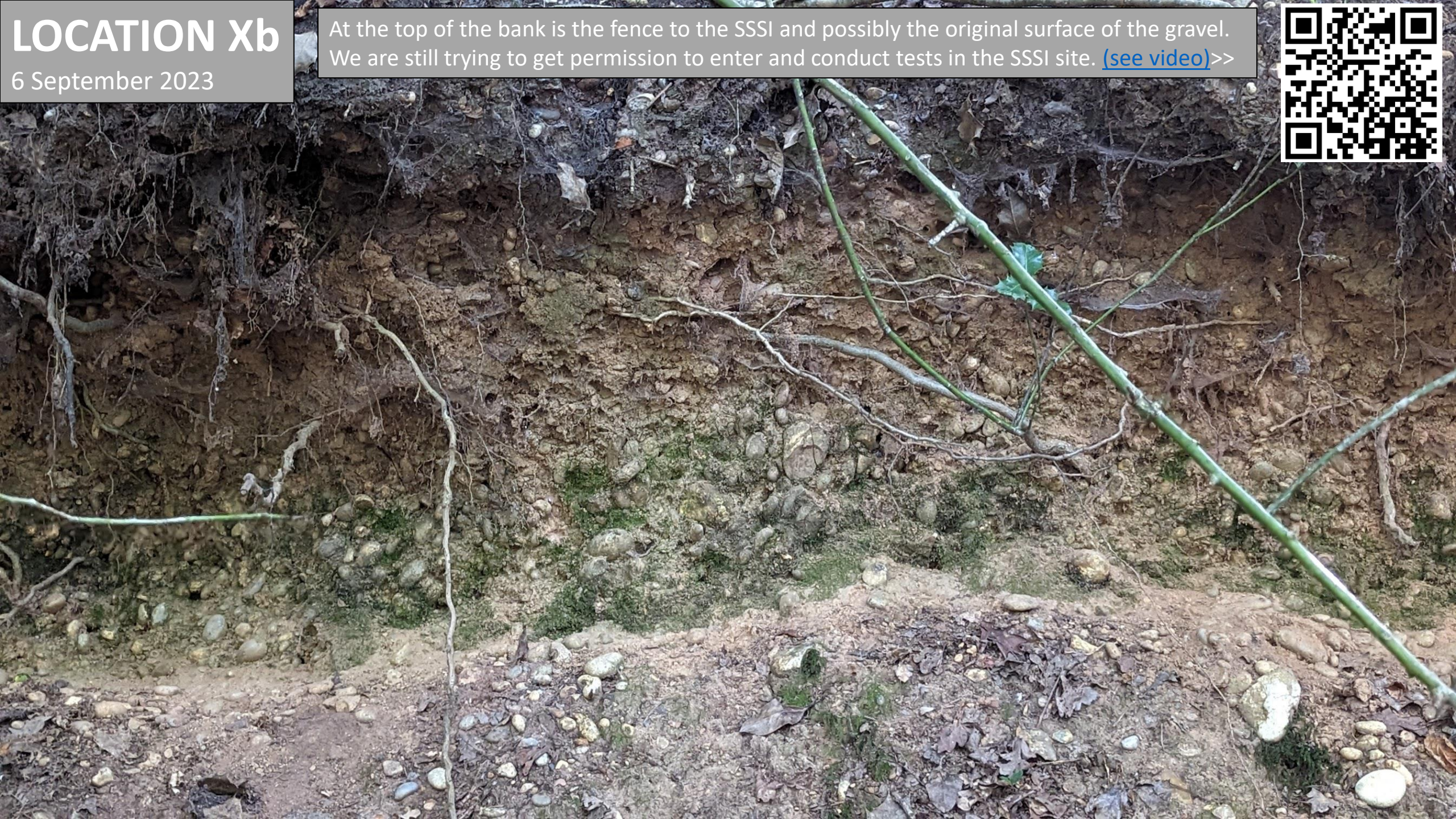
6 September 2023



LOCATION Xb

6 September 2023

At the top of the bank is the fence to the SSSI and possibly the original surface of the gravel.
We are still trying to get permission to enter and conduct tests in the SSSI site. ([see video](#))>>



LOCATION Xb

6 September 2023

View from the top of the bank looking into the SSSI. At this point there is an extensive flat surface which is close to the bank which was examined in 2011. This video shows what we could see from the Common side:

<https://youtu.be/BqFCUb7AY8M> . We are still trying to get permission to enter and conduct tests in the SSSI site.

