

**HASTINGS & DISTRICT GEOLOGICAL SOCIETY and
HORSHAM GEOLOGICAL FIELD CLUB**

Joint field trips to SMOKEJACKS BRICKWORKS, WALLISWOOD, nr. OCKLEY, SURREY

Dates: Sunday 16th JUNE 2019 & Sunday 22nd SEPTEMBER 2019, 10:30am–4:30pm

IMPORTANT – QUARRY ACCESS: It is imperative that you stay within the confines of the main quarry pit and do not go near the stockpiles or the clay preparation area. The Quarry Manager has brought to my attention an incident last year where someone got stuck in the mud in this off-limits area and had to be rescued by the Clay Prep Operator. Not only is this extremely dangerous, but it breaches the Company's Health & Safety Rules. Any further occurrence is likely to jeopardize future access to the quarry.

Contact: Please contact Peter Austen if attending (tel: 01323 899237, e-mail: p.austen26@btinternet.com) with a contact phone number in case there's any change of plan.

Meet: 10:30 am in the quarry office car park at grid reference TQ 116 373 (O.S. map 187 – 1:50,000 series). Postcode RH5 5QH for SatNav. The site closes at 4:30 pm.

Smokeyjacks is just south of Walliswood (4 km southwest of Ockley), Surrey. The entrance is signed as Wienerberger Limited – Ewhurst Works.

Equipment: Hard hats, reflective jackets and protective goggles are compulsory. Eye protection, hammer, chisels, wrapping material for specimens, handlens and boots suitable for claypit. Packed lunch. Allow for the vagaries of the British weather – warm clothing and wet weather gear if necessary.

Risk Assessment: All attendees must familiarise themselves with the Risk Assessment for the site, circulated with these details.

Minimum age: 12 years, and must be accompanied by a parent or guardian.

N.B. It is likely that parts of the pit will be flooded – please take care.

About the Site

This Weald Clay brickpit has yielded a number of important finds over the past three decades. In 1983 Bill Walker, an amateur collector, found a new theropod dinosaur, *Baryonyx walkeri*, which proved to be crucial to the understanding of the spinosaurs, and on the Geologists' Association fieldtrip to the site in 2001 a well-preserved partial skeleton of a juvenile iguanodont (*Mantellisaurus atherfieldensis*) was discovered, and subsequently excavated by the Natural History Museum. Two *Baryonyx* teeth were also recovered from the *Mantellisaurus* excavation, suggesting that it may have been scavenged by a *Baryonyx*. The site is also known for the early flowering plant *Bevhalstia pebja* (published in 1996), remains of which can still be found. The concretions of sideritic mudstone and siltstone have also yielded numerous insect remains (13 orders) including many new species. Other finds include dinosaur footcasts, remains of pterosaur, fish, crocodile, crustaceans, molluscs and non-angiospermous plants (ferns and cycads, and a *Sequoia*-type cone). A death-bed assemblage of teleost fish has also been found, which included the first articulated pycnodont fish from the Wealden. More recently a new species of spinicaudatan (clam shrimp) and three new groups of insects have been discovered (earwig, mayfly and 'stick insect'). During 2016 a small claw, possibly *Baryonyx*, was recovered and during 2017, a tooth from a large unidentified theropod.

Reports of previous visits to Smokeyjacks can be found in:

Wealden News: <http://geoconservationkent.org.uk/> (click on 'Resources' and scroll down page)

GA Magazine: <http://www.geologistsassociation.org.uk/gamagazine.html>

Hastings & District Geological Society Journal: <http://www.hastingsgeology.btck.co.uk/> (click on 'Publications') (from 2015)

More information on Wealden fossils, together with an up-to-date summary of the site, can be found in Batten (2011) and Austen and Batten (2018).

References

AUSTEN, P. A. and BATTEN, D. J. 2018. English Wealden fossils: an update. *Proceedings of the Geologists' Association*, **129**, 171–201.

BATTEN, D. J. (Ed.), 2011. *English Wealden fossils*. Palaeontological Association, London, Field Guides to Fossils 14, ix + 769 pp.

RISK ASSESSMENT

FOR FIELD TRIPS TO SMOKEJACKS BRICKWORKS, OCKLEY, SURREY

on Sunday 16th JUNE 2019 & Sunday 22nd SEPTEMBER 2019.

By kind permission of Wienerberger Limited

Leader

Peter Austen – Hastings & District Geological Society / Horsham Geological Field Club.

Personal protective equipment required

Hard hats, high visibility jackets and protective goggles are compulsory, together with strong footwear.

HAZARD	TYPE OF RISK	RISK LEVEL	PRECAUTIONS to reduce the risk level
Chips of rock from hammering.	Eye injuries	High	Wear eye protection. Other people to remain at safe distance.
Soft mud.	Trapped in mud	High	Avoid soft mud – not always obvious. If trapped call for help LOUDLY . Do not struggle.
Sun / heat	Sunstroke / Sunburn / Dehydration	High	Keep well covered. Use sunblock on exposed skin. Take sufficient drink.
Moving vehicles and machinery.	Hit by vehicle or machinery	Medium	Wear high visibility jacket. Remain aware of vehicles and vehicle noise. Call warning to others.
Water in base of quarry	Drowning	Medium	Keep away from waters edge.
Danger from overhangs	Head injury / crush injury	Medium	Avoid overhangs, do not undermine the face when digging on a slope, wear a hard hat
Uneven surfaces – deep furrows and slopes	Twisted ankles, trips and associated injuries	Medium	Wear strong footwear.
Adverse weather conditions – rain / cold	Hypothermia	Low	Wear warm, weatherproof clothing if adverse weather is forecast.
Brickworks site	Accident whilst walking through works to quarry	Low	Keep clear of all machinery and brick stacks.
Stockpile and Clay Preparation Area	Hit by vehicle or machinery	High	Keep away. Area is strictly off-limits.
Works car park	Damage in car park or during parking	Low	Drive carefully and keep a look out.

The leader will take all measures reasonably possible to prevent accidents and to ensure the safety of all members of the party. Members of the party must follow any instructions given by the leader or an official of Wienerberger Limited. Members must themselves behave in a responsible manner and ensure that none of their actions endanger either themselves or any other person.

**Peter Austen
January 2019.**