

SGI 28 Fossils of Trafalgar Square

City of Westminster

Trafalgar Square

Grid Ref: Southwest corner where most artefacts were found (under Uganda House, 58-59 Trafalgar Square, St. James's, WC2N 5DX). TQ 2999 8036

For 300 years, fossil remains have been recorded from Trafalgar Square and the surrounding area, but it was the finds made during the excavation of building foundations in the southwest corner of the square in the 1950s, that dated the Thames gravels to the Last Interglacial (Marine Isotope Stage 5e, c. 125,000 years ago).

Trafalgar Square is also remarkable in that from north to south it crosses several terraces in the sequence of Terrace Gravels related to succeeding ice ages. The paved area in front of the National Gallery is at a level of about 12m OD while Downing Street is at about 5m OD, a drop of 7m. The statutory top of the present river wall is at 5.41m OD. Much of the wide flat area of the West End is formed on the Lynch Hill Gravel Terrace of the Thames, the oldest of the sequence in this area dated at about 350,000 years old. That is deposited on a surface of the considerably older London Clay (more than 50 million years) cut at about 15m OD. The National Gallery is built on the slightly younger Hackney Gravel which is deposited on a surface of London Clay cut by the Thames at a level of about 10m OD. Rain soaking into these gravels emerges from these surfaces at springs at levels high enough in the past to have supplied low pressure water to Whitehall Palace via conduits. *South of a line passing through the centre of Trafalgar Square the Thames has cut a markedly lower surface into the London Clay at about -2m OD. This surface is overlain by a series of gravels (Spring Gardens Gravel), variable horizons of sands and silts (Trafalgar Square Sands and Silts) and finally by Brickearth (Langley Silt).* The deposits are part of the Trafalgar Square Complex, which follows the Taplow/Mucking Terrace and precedes the Kempton Park/East Tilbury Marshes Terrace that in turn is overlain by the modern floodplain alluvium.

The striking finds uncovered during the excavations in the 1950s within the Trafalgar Square Complex included the remains of hippopotamus, bones of straight-tusked elephant, lion and bison. The presence of hippopotamus is particularly significant as it is a species only recognised from this time period in Britain. Although restricted to sub-Saharan Africa today, 125,000 years ago hippopotami were found throughout Britain as far north as Stockton-on Tees. Also recovered were fossils of plants, molluscs, beetles, reptiles and amphibians that indicated summer temperatures several degrees warmer than the present, as well as mild winters. These environmental fossils further indicated a mixed landscape of temperate forests and open grasslands, with locally wet woodlands on the floodplain. There would also have been small local pools of stagnant water and a well vegetated water body present in the vicinity of the site. Today these are replaced by the famous fountains that were originally supplied with artesian water from the chalk deep beneath the London Clay. It would be appropriate that a hippopotamus statue should take pride of place on the fourth plinth within Trafalgar Square.

Access

The most important finds were made while excavating for 58-59 Trafalgar Square in the southwest corner. There is unfortunately no longer any plaque to mark this important discovery.



Reconstruction of Trafalgar Square 125,000 years ago.
British Geological Survey, 1996

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