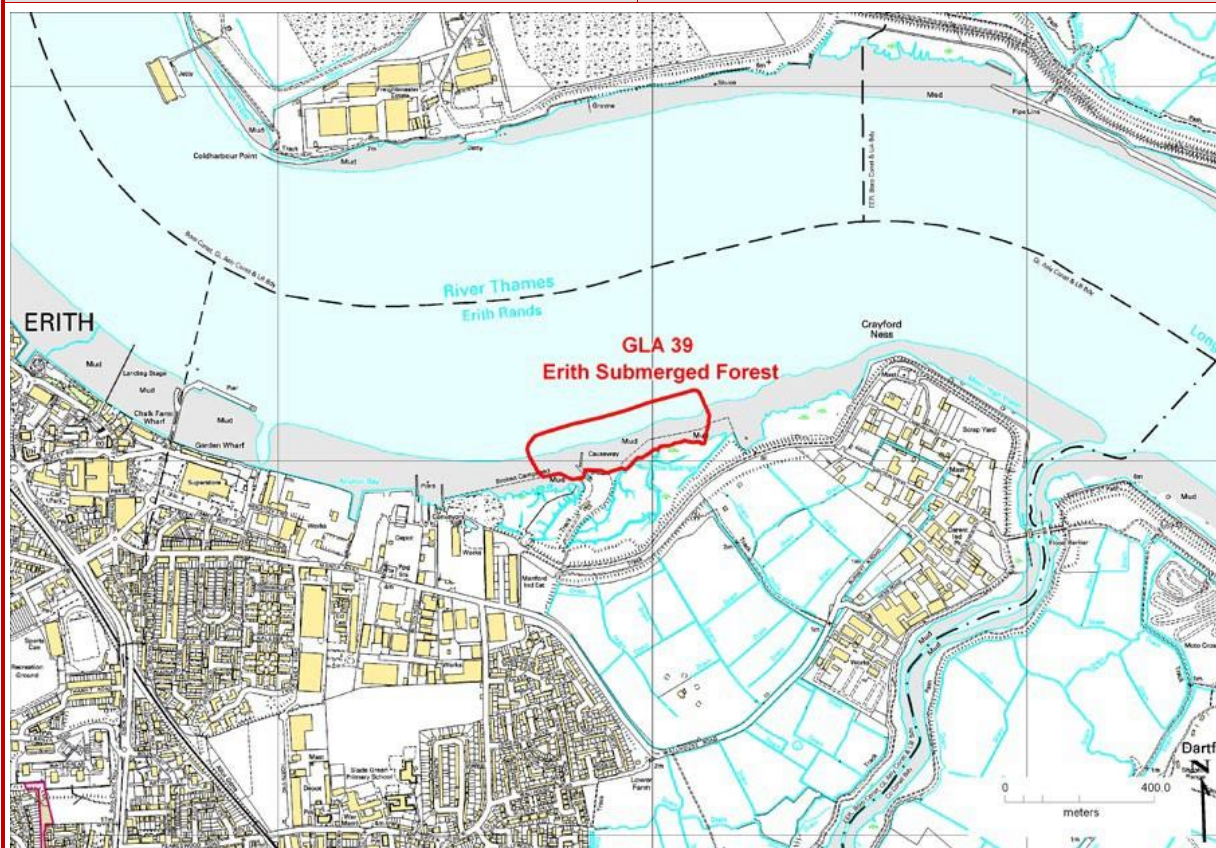


GLA 39 Erith Submerged Forest and Saltings

| | |
|---|--|
| Grid Reference: TQ 526 776 | Site Type: Natural foreshore exposure of submerged forest |
| Site Area (hectares):6.28 | Current use: Natural marsh land and foreshore |
| Site ownership: Port of London Authority | Borough: London Borough of Bexley |
| Field surveyor: Laurie Baker, Diana Clements Re-visited: Laurie Baker, Diana Clements, Paul Rainey | Date: 2010 Dates: January 2016 |
| Current geological designation: RIGS | Other designation: Metropolitan SINCC (River Thames and tidal tributaries) |
| Site Map | OS Topography © Crown Copyright |



Stratigraphy and Rock Types

| | |
|---------------------|------------------------------------|
| Time Unit: Holocene | Rock Unit: Alluvium & peat |
| Rock Type: Alluvium | Details: peat at varying horizons. |

Site Description

This is the best place on the Thames Estuary within Greater London for viewing the Neolithic/Bronze Age submerged forest. At low tides whole tree trunks are revealed amongst the root balls and occasional nuts and seeds can also be found. Peat beds are also found on the banks above mean high tide level. At least five different ages of peat and trees have been dated ranging from over 5,000 years ago to approximately 3,000 years ago. Fifteen different tree and shrub species have been recognised of which the majority are alder. Other species include birch, willow, poplar, yew, maple, ash, oak, holly and elm. Shrubs include dogwood, alder buckthorn and buckthorn. The site represents a change from a drier environment when the yew and other 'dry' species were growing, to the wetter environment, produced by rising sea levels, leading to the dominance of alder.

Assessment of Site Value

Geodiversity topic: Holocene processes in the Thames

Access and Safety

| Aspect | Description |
|------------------|---|
| Safety of access | Access to the Thames foreshore is via a path (signed to Erith Yacht Club at |

| | | |
|--|--|---------------|
| | TQ 527 779) leading from Manor Road, off the A2016 Bronze Age Way, Erith. After about 150m turn right onto the Thames Cycle Route along the top of a barrier as far as a concrete structure with a steel covering and then down to the foreshore (TQ 532 781). The submerged forest can only be seen at low tide. Access to the foreshore itself is potentially dangerous and slippery and should only be attempted on a falling tide and never alone . | |
| Safety of exposure | Storms could potentially damage the exposure as could any development along this stretch of the Thames | |
| Permission to visit | Open access. A further exposure just to the west requires permission from the Erith Yacht Club. | |
| Current condition | The foreshore is muddy, slippery and dangerous and should not be attempted alone. | |
| Current conflicting activities | None known | |
| Restricting conditions | Tide, weather, mud | |
| Nature of exposure | Natural foreshore exposure of Neolithic submerged forest | |
| Culture, Heritage & Economic | | |
| Aspect | Description | Rating |
| Historic, archaeological & literary associations | Details can be found in Seel, 2000 and Sidell & Haughey, 2007. Described in GA Guide 68, 2012, Itinerary 10. | 8 |
| Aesthetic landscape | Public viewing from cycle route | 7 |
| History of Earth Sciences | Described in early editions of the Proceedings of the Geologists' Association | 4 |
| Economic geology | None | 0 |
| GeoScientific Merit | | |
| Geomorphology | Record of changing sea levels in the Thames Estuary and an example of existing saltmarsh. | 6 |
| Sedimentology | At least five peat horizons have been dated between 3,000 and 5,000 years old | 6 |
| Palaeontology | At least 15 different species of plant | 6 |
| Igneous/mineral/ Metamorphic Geology | None. | 0 |
| Structural Geology | None. | 0 |
| Lithostratigraphy | Holocene alluvium and associated peat horizons | 6 |
| Potential use | Research; further education; on-site interpretation. | |
| Fragility | Storms; human engineering of Thames estuary | |
| Current Site Value | | |
| Community | Valuable, as can be seen from cycle route | 8 |
| Education | Excellent evidence for teaching about past environments of the Thames Estuary and about global warming and sea-level rise | 9 |
| Geodiversity value | | |
| RIGS: | The best exposure of the Neolithic submerged forest with reasonable access for local community. | 6 |

GLA 39 Erith submerged forest

Photo: Jane Sidell



Detail, September 2009. Photo: Laurie Baker