

COUNTY: OXFORDSHIRE

SITE NAME: KIRTLINGTON QUARRY

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authorities: Cherwell District Council, Oxfordshire District Council

National Grid Reference: SP494199

Ordnance Survey Sheet 1:50,000: 164 **1:10,000:** SP41 NE, SP42 SE

Date Notified (Under 1949 Act): 1955 **Date of Last Revision:** 1977

Date Notified (Under 1981 Act): 1986 **Date of Last Revision:**

Area: 3.3 ha 8.2 ac

Description and Reasons for Notification

Of only five Middle Jurassic mammal sites in the world (all of them British) Kirtlington has yielded by far the most diverse assemblage described to date. At least nine species of therian and prototherian mammals occur, together with a stratigraphically late tritylodontid. These occur in a discontinuous rootleted clay of probable marsh origin within the basal Forest Marble Beds (Upper Bathonian). The bed has yielded crocodylian, pterosaur and theropod dinosaur material. The richest mammal-bearing locality of Middle Jurassic age known anywhere in the world.

The Kirtlington Mammal Bed in the Forest Marble Beds at this site has also yielded a rich and diverse fauna of fish species based on teeth. These include Lepidotidae, Pycnodontidae and *Caturus*. The site is very rich in micro-shark teeth. Elasmobranchs include *Asteracanthus*, *Hybodus* and a lamnid.