

EXCURSION

Bradley Fen Brick Pit, Whittlesey

Leader: Neil Turner (Nottingham Natural History Museum, Wollaton Hall)

Sunday, 1st June, 2003

An interesting day was spent looking for fossils in the Middle Jurassic Oxford Clay at Bradley Fen Brick Pit (NGR: TL237979) followed by a visit to the geology displays at Peterborough Museum that include marine reptile skeletons from the brick pits. Bradley Fen Pit is the only site still working for brick clay in the Peterborough area, and is run by Hanson Brick. We were very grateful to Chris Boyles, the Works Manager, who came along on the day and gave us access to the site. We were also grateful to members of the Stamford and District Geological Society who came to the brick pit and then later, at Peterborough Museum, talked about the fossil finds in the Peterborough area over the years.

Due to the unstable nature of the Oxford Clay, we could not collect safely from the steep quarry faces, but there were numerous piles of clay spoil all over the quarry floor that were rich in fossils and where we were able to collect. After an initial threat of rain as we arrived, the weather was fine and dry for the rest of the day. Many invertebrate fossils were found in the brick pit, including ammonites, particularly Kosmoceratids, belemnites and bivalves. A few recovered vertebrate fossils included two vertebrae thought to be of the marine crocodile, *Steneosaurus*. Peterborough is famous for its brick - making industry, and many brick pits have been dug to extract the clay since late Victorian times. Many fossils have

been found over the years, and a belemnite brought along from the Nottingham Natural History Museum's collections was just like those being found on the day, but had been collected from a brick pit at Whittlesey 100 years beforehand.

After we had searched for and found numerous fossils, even though a complete and well-preserved crocodile skeleton still eluded us, we made our way to Peterborough Museum to view their informative display of the geology of the Peterborough area on the First Floor. This includes large skeletons of Middle Jurassic marine reptiles like *Steneosaurus*, with which we were able to compare the vertebrae that we had just found at Bradley Fen, *Cryptoclidus eurymerus* and *Ophthalmosaurus*. Also, on display was the small pliosaur, *Pachycostasaurus dawni*, that could be seen to have thickening of the rib cage and vertebrae, and is thought to be a benthic-feeding carnivore (Cruickshank et al, 1996). The museum's geology exhibits have already been described in the *Mercian Geologist* (Dawn, 1997). After we had looked at the displays we were shown the geology workshop by members of the Stamford and District Geological Society where, among other things, they make casts of fossils for sale in the museum shop. The day was a great success, made the more interesting by the help we received from everyone involved.

References

- Dawn, A., 1997. Peterborough Museum and its collection of marine vertebrates from the Oxford Clay. *Mercian Geologist*, **14**, 90-93.
- Cruickshank, A.R.I., Martill, D.M. & Noe, L.F., 1996. A pliosaur (Reptilia, Sauropterygia) exhibiting pachyostosis from the Middle Jurassic of England. *Journal of the Geological Society*, London, **153**, 873-879.



Collecting from the Oxford Clay at Bradley Fen Brick Pit, between Peterborough and Whittlesey