

Immortal Clay II: a first for Alfred Leeds — but is it a reptile egg?Sandra D. CHAPMAN¹ & Jeff J. LISTON²

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The Alfred Leeds Collection is one of the major fossil marine reptile collections at the Natural History Museum, London. It contains at least 300 specimens collected towards the end of the 19th Century from the Middle Jurassic Oxford Clay around Peterborough. Apart from dinosaur remains one of its more unusual treasures is BMNH R2903, the first specimen to have been described as a fossilized „reptile egg”. „The Sphere” declared that it predated the discovery of dinosaur eggs in Mongolia (Anonymous, 1923). Then in 1950, W. E. Swinton featured the enigmatic fossil in an article for *The Illustrated London News* suggesting that it might be an amphibious dinosaur egg. As an isolated curiosity, and given the unlikelihood of a fossil egg occurring within the marine sediments of the Oxford Clay, it has been overlooked for decades and still lacks a satisfactory identification. CT scanning work undertaken by the University of Glasgow in 1995, as part of a comparative programme of scanning technologies used with fossil eggs, revealed the internal density contrasts of the object, and appeared to show a discrete mass of components within. This CT

scanning work has been supplemented by SEM analysis of the surface of the object that indicated a laminated structure to the outer crust or „shell”. However the thickness and structure of the „shell” militates against a dinosaurian/avian diagnosis. In addition an X-Ray Diffraction Analysis (XRDA) recently carried out in the Mineralogy Department at the NHM points to the presence of an eggshell layer on the top or convex surface and ammonite debris on the under or concave surface. Therefore there is now good evidence that the specimen in all probability is a fossilised Middle Jurassic reptile egg. Our study continues with further SEM analyses that may yet reveal the egg’s true identity. In our poster presentation we suggest ways in which the „egg” and the ammonite might have become united.

References

- Anonymous, 1923. A fossil reptile’s eggs unearthed in England. *The Sphere* 17th November 1923: 105 + pl. 43.1.
- Swinton, W.E., 1950. Fossil eggs from Tanganyika. *The Illustrated London News* 217: 1082-3.