

News and Highlights

China's Dinosaur Egg Fossil Made its Way Home after Being Smuggled to America for 28 Years

On 28 February 2012, under the close judiciary of and diplomatic cooperation between the United States and China for five years, a fossilized nest containing 22 dinosaur eggs, which was smuggled to America, finally made its way home.

In 1984, Chinese archaeologists excavated the fossil in the Nanxiong Basin, Guangdong Province. The dinosaur eggs slightly varied in size and are tightly arranged in the fossil and laid around the edge of the rounded nest. Of these, 19 contain dinosaur embryos; as can be seen in the photo, some even have a rather developed skeleton (experts believed that several eggs may have been rearranged by the collector). Unfortunately, scientists were not able to study it before it disappeared mysteriously soon after its discovery.

The dinosaur nest was smuggled into Hong Kong, southern China, and then illegally channeled to Taiwan, China in 2003 before it was finally bought by an American private collector. The fossil entered the USA via Florida in January 2004 by the collector's hands. In September 2006, the collector intended to sell it by auction. On December 1 that year, *US Today* published the news saying that one Chinese dinosaur nest containing 22 eggs, some of which contain embryos, would be auctioned by a named auction house, the nest made its first formal debut on December 3, and was sold for the price of US\$450,000. This act drew the close attention from both Chinese and US authorities. Through unremitting efforts over the last five years, the US authorities eventually returned the important fossil to its rightful home in China.

The Nanxiong Basin is located at the foot of Dayuling Ranges on the eastern margin of the Nanling Mts. This locality has yielded significant dinosaur fossils comprising *Tyrannosaurus* (family Tyrannosauridae) and *Nanshiungosaurus brevispinus* (family Therizinosauridae), which belong to the saurischian Theropoda, and *Microhadrosaurus* (ornithischian Hadrosauridae), based on skeletons discovered from this 80-km-long and 18-km-wide basin.

Chinese authorities have emphasized that professional scientists including palaeontologists as well as amateur enthusiasts both at home and abroad are welcome to carry out scientific investigation at such sites in China, but zero tolerance is given to smuggling. For regulations governing collecting, see News in *Acta Geologica Sinica* (English edition) 86(2): 532. For detailed information, please contact at geoacta@163.com (provided by Hao Ziguo, Fei Hongcai, Liu Lian).



NB. the photo was intercepted from Xinhua News Agency, and there is no scale.

General remarks

"All fossils entering the market from clandestine sources inspire reasonable concern about their provenance and authenticity, particularly when they claim unparalleled importance and are offered at very high prices. This example is no exception and cannot be accepted at face value until it has been authenticated by appropriately qualified experts. While it is certainly premature to voice any definite opinions, inspection of several images circulated by the auctioneers in 2006 confirm certain facts but also reveal a few anomalies. The elongate eggs are reportedly those of a raptor (*Oviraptor*?) of Late Cretaceous age, about 65 million years old. Some specialists maintain that eggs of this type were laid in pairs, with a single egg emerging from each of the mother's two oviducts simultaneously. Consequently the total of 22 eggs might have originated from a single animal over a period of some days, or even weeks, or it might be the outcome of a communal (and remarkably well coordinated) effort by several animals. Even so, the eggs here are spaced fairly evenly, not clustered into distinct pairs, and certain features of the preservation look decidedly unusual. For a start, it seems to be an astonishing

coincidence that so many eggs should have openings or windows of just the right size, and in just the right position, to display the embryos within to their best advantage. Surely some, at least, of those eggs must have been opened up artificially and not by natural erosion? Yet there are none of the needle-marks or chipped surfaces that would betray the work of a preparator, and the rock surface surrounding the eggs is immaculate, with none of the irregularities, stains and fractures that one would usually see in a naturally weathered specimen. In those superficial respects the specimen looks a bit too good to be true. This eye-catching fossil has probably enjoyed the benefit of some cosmetic enhancement, but it will need long and careful study to determine the full extent of that enhancement and, thus, its real scientific value."

A nest with 22 raptor eggs is an extremely unusual fossil, yet exactly such an item (presumably this specimen?) was offered for sale by the same auctioneers on 8th June 2003 and sold for US\$11,750. Their catalogue for 3rd December 2006 also offered a nest with 22 raptor eggs (surely the same specimen?), measuring 21×13×8.5 inches, with an estimate of US\$4,000–6,000, but it was withdrawn from auction. How and why has it now reappeared on the market with such an enormously inflated price-tag?" (from an anonymous paleontologist who specializes in dinosaurs)



Close-up of one egg showing a purported dinosaur embryo; no scientific study has yet been done (**NB.** the photo was intercepted from Xinhua News Agency, and there is no scale).