

Dinosaurs

20 August 1991



The Royal Mail will issue five stamps featuring Dinosaurs on 20 August; these stamps celebrate the 150th anniversary of the first use of the word dinosaur at a scientific meeting in July 1841. Brilliant detective work by Professor Richard Owen brought dinosaurs back to life in the public mind. Life-sized concrete models of Owen's dinosaurs went on display at Crystal Palace in 1854; people flocked to see them and they have been a major tourist attraction ever since.



The **22p** stamp (basic inland first class and EEC countries rate) featured *Iguanodon*; the **26p** value (basic non-EEC rate) *Stegosaurus*; **31p** (worldwide postcard rate) *Tyrannosaurus*; **33p** (inland first class, second weight stage) *Protoceratops*, and **37p** (Airmail Zones 1 and 2 basic rate) *Triceratops*.

Dinosaur remains were found in China in the 16th century BC; the remains were treated as "dragons' teeth" and ground up for medicinal purposes. The first scientific study of dinosaurs was undertaken in Britain 150 years ago. The word *dinosaur* was first used by Professor Robert Owen (1804-92) at the meeting of the British Association for the Advancement of Science at Plymouth in 1841. The word derives from the Greek, meaning "fearfully great or terrible reptile".

Owen, a medical anatomist, was Hunterian Professor at the Museum of the Royal College of Surgeons at Lincoln's Inn Fields. Much of his work involved dissecting dead animals from London Zoo and he became a leading compar-

ative anatomist. In 1856 he moved to the British Museum and in 1881 he became the first Superintendent of Collections at the new Natural History Museum in South Kensington.

In the 1830s he researched British fossil reptiles; mostly basing his conclusions on large quantities of teeth and bone fragments in private collections. He deduced that the fossil reptiles were large and unlike any living creatures. Animals such as *Iguanodon* were estimated to be about 30 feet long; had massive pillar-like legs, short powerful toes and a backbone of great strength. Owen considered that dinosaurs represented the ultimate stage in reptilian design.

The concept of dinosaurs captured the public imagination. In 1852 the great glass exhibition hall of the Crystal Palace (Hyde Park) was dismantled and moved to a permanent site at Sydenham in south London. It is said that Prince Albert suggested that life-sized models of prehistoric animals should be placed around the grounds. Benjamin Waterhouse Hawkins, who had helped with the glass palace, was commissioned to produce the models. Hawkins consulted Professor Owen and created four concrete dinosaur models - two of *Iguanodon*, and one each of *Megalosaurus* and *Hylaeosaurus*. A banquet, attended by scientists and local dignitaries was held inside the mould of an *Iguanodon*, staged by the Crystal Palace Company on New Year's Eve, 1853. This event was widely reported and dinosaurs became a major talking point in Victorian drawing rooms.

Since Owen's day, further research based on



the discovery of complete skeletons has led to a revised view of the appearance of dinosaurs. Owen's view of them as gigantic, scaly, rhinoceros-like creatures has been shown to be inaccurate but it is how many still envisage them. The models at Sydenham remain as a testimony to Owen's work and the new stamps will promote interest in dinosaurs and the person who gave them their name.



The British Association for the Advancement of Science will be holding its 1991 meeting in Plymouth on 25-30 August; returning to the city for the first time since 1841. The theme of the meeting will be "Quality of Life"; some 4,000 delegates will attend from around the world. Dr Beverley Halstead of the Geology Section of the British Association was a prime mover behind this issue of Dinosaur stamps. Sadly Dr Halstead was killed in a car accident earlier this year and fellow scientists will remember him when they use the stamps he so strongly promoted. In championing Dinosaur stamps, he asked the presidents of almost every learned society to write to the Royal Mail in support of the idea.

Technical Details

The stamps were designed by Bryan Kneale and printed by Harrison & Sons Limited in photogravure on phosphor-coated paper. They are of "almost square" format, 35 x 37mm, printed in sheets of 100 with PVA Dextrin gum. Perforation measures 14½ x 14.

Presentation Pack

The pack (No. 220) will cost £1.80. Each pack will contain a free child entry ticket to the Natural History Museum in London (worth £1.75).

Royal Mail Stamp Cards

Cards, featuring enlargements of the stamp designs, will be available approximately two weeks before the stamp issue, price 19p each. They are numbered 137A-E.

First Day Cover

The Royal Mail first day cover will be available from the British Philatelic Bureau, "Collections", philatelic counters and main post offices approximately two weeks before 20 August, price 19p. Two pictorial postmarks will be used for the first day cover service - one for the Bureau, the other for Plymouth.

A first day cover service will be provided by the Bureau with the official Royal Mail cover addressed to the destination required with the stamps cancelled with the requested postmark. Application forms, available from the Bureau and main post offices, should be returned not later than 20 August.

Collectors may send their own cards/covers for the pictorial postmarks. These should be sent on the first day of issue in a stamped outer envelope endorsed "Pictorial First Day of Issue Postmark" to: British Philatelic Bureau, 20 Brandon Street, EDINBURGH EH3 5TT (Bureau postmark) or Wales & The West Special Handstamp Centre, Royal Mail Cardiff, Penarth Road, CARDIFF CF1 1AA (Plymouth postmark). Collectors wanting their cards/covers returned under cover should enclose a suitable addressed envelope. This need not bear additional postage stamps, the postage being already paid by the stamps affixed to the covers for postmarking.

First Day Posting Boxes will be provided at most main post offices for those collectors who wish to post covers to receive the standard, non-pictorial "First Day of Issue" handstamps. In addition, pictorial "First Day of Issue" postmarks will be used at City of London EC (shows City coat of arms), and Durham (Cathedral). Reposting addresses: London North SHC, Royal Mail City and International, King Edward Street, LONDON EC1A 1AA (City of London handstamp); and Northern England SHC, Royal Mail Newcastle, Forth Street, NEWCASTLE UPON TYNE NE1 1AA (Durham). These handstamps were introduced on 17 January 1989 and 22 March 1988 respectively.

A number of special handstamps sponsored by stamp dealers and others will be used on 20 August - details of these will be found in the *British Postmark Bulletin*, available on subscription from the British Philatelic Bureau.

Souvenir Cover

A souvenir cover, of similar design to the first day cover, will be available from "Collections" and philatelic counters from 21 August, price 19p. This will be on sale for one year.

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ROYAL MAIL MINT STAMPS



meeting of the British Association for the Advancement of Science at Plymouth in July 1841 and was coined by Professor Richard Owen (1804-1892).

Owen was a medical anatomist who trained at Edinburgh and St Bartholomew's Hospital, London. He was appointed Hunterian Professor at the Museum of the Royal College of Surgeons and went on to build for himself a formidable reputation as Britain's leading comparative anatomist. His career continued to prosper and, after the completion of the Natural History Museum in 1881, Sir Richard Owen (as he was later to become) was appointed as the first Superintendent of Collections.

Owen's broad and expert knowledge of both living and fossil animals made him a natural choice to review British fossil reptiles during the late 1830s. The need for such a review had become pressing because in the early years of the nineteenth century an explosion in the rate of discovery and description of fossils had occurred. Great excitement and interest had arisen in collecting and studying fossils of all types through the work of the Frenchman Baron Georges Cuvier (1769-1832). In the 1790s and early 1800s, Cuvier had been able to prove, for the first time, not only that fossils were the remains of once living creatures rather than simply being curious stones which could be dug from the ground, but also that some reptiles must have been monstrously large.

Understanding the true nature of these early fossils was difficult because the fossil remains were almost entirely made up of fragments of bone. Here, Owen's most important

contribution was the form of the legs as possible in the form of the legs of living tropical mammals, at a time in the past when the world was ruled by reptiles.

The combination of Owen's fame and the concept of the dinosaur captured the public imagination in 1852. Joseph Paxton's Crystal Palace, which had formed the centrepiece of the Great Exhibition of 1851 in Hyde Park, was dismantled and moved to a new permanent site at Sydenham. During the planning for the reopening, it was suggested that the grounds around the Palace should be landscaped and populated with life-sized models of prehistoric animals. Benjamin Waterhouse Hawkins was commissioned to build the models and, working closely with Owen, created four

life-sized restorations of the dinosaurs in brick, reinforced with iron bars and covered with concrete. Two models of Iguanodon, and one each of Megalosaurus and Hylaeosaurus. After the official opening of the Crystal Palace on Queen Victoria in June 1854, visitors flocked to see the dinosaurs and other prehistoric monsters and, although the Palace itself burned down in 1936, the incredible monsters survived and can still be seen to this day.

Since the 1850s, considerable advances have been made in the study of dinosaurs, largely through the discovery of complete, or nearly complete skeletons. These have shown that Owen's view of dinosaurs as gigantic, scaly, rhinoceros-like creatures was accurate, as were his models. Considering the material with which he had to

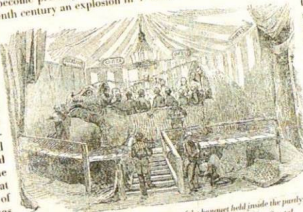
1. Fossilised one bone of an Iguanodon.



2. Baron Georges Cuvier (1769-1832), whose work on fossils remains an important part of understanding the true nature of dinosaurs.



3. The central hall of the Natural History Museum in South Kensington, London.

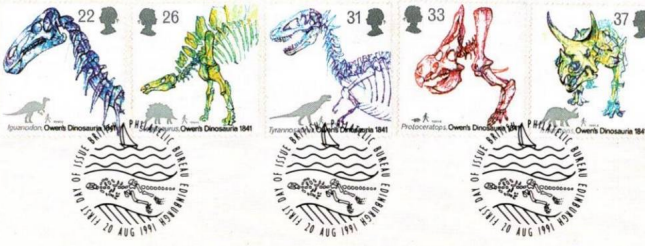


4. An illustrated London News engraving of the banquet held inside the partly built model of one of the Iguanodons on New Year's Eve 1853 at Crystal Palace. It was attended by two local dignitaries and six women and hosted by Hunt-Lives and Owen.

5. Fossil remains of Coeloceras dinosaur, which are over 200 million years old.



6. A contemporary impression of the interior of the Crystal Palace at Sydenham in which Hawkins constructed the dinosaurs.



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ROYAL MAIL FIRST DAY COVER
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