
I was a junior in high school when the first edition of Marsh’s Dinosaurs came out and it was the first true scientific publication to join my collection of dinosaur books. It has remained a major resource for me all those years and it shows: the covers have long since fallen off, and the pages are dog-eared and stained. For me, books are tools to be used—written in, marked up, and sadly, eventually worn out. Thus, it was with delight when I learned that Marsh’s Dinosaurs was to be reprinted.

The book has two new parts, a brief Foreword from one of Ostrom’s former students, Peter Dodson, and a longer Historical Update on the collecting of dinosaurs in the Como Bluff region by my colleague Cliff Miles. The Foreword encapsulates the impact Marsh had on dinosaur paleontology to this day and the continued influence of the lithographs printed in Marsh’s Dinosaurs. The Historical Update is an important summary of the work and discoveries made in the past two decades at Como Bluff and surrounding areas, including the first discovery of an australasian set for Apatosaurus by the Tate Museum of Casper College, and a nearly complete Camarasaurus grandis by Western Paleontological Laboratories. The original text by Ostrom and McIntosh recounting the discovery and excavation of dinosaurs by crews working for O. C. Marsh, is given verbatim. There is no attempt to update the information based more current work, such as Kohl and McIntosh (1997), so it is important to keep in mind that this book is a reprint, not a second edition.

The real “meat” of the book is, of course, the 150 lithographic illustrations of sauropod and stegosaur bones. Marsh had commissioned these and other illustrations while serving as the Vertebrate Paleontologist for the U.S. Geological Survey. This position gave him access to a considerable amount of tax payer’s money (there are letters in the Marsh correspondence archives that show that this was not a limitless supply). Marsh had planned about six monographs when the lithographs were commissioned, of which the Dinocerata and Odontolophithes were completed and published before Marsh’s death. Another monograph, the Ceratopedia, was completed after his death by John Hatcher and Richard Lull, and the Titanotheres was completed by Henry Osborn. Two other monographs on the Sauropoda and Stegosauria were planned but never completed. It is the lithographs for these monographs that Ostrom and McIntosh published.

The original illustrations are true works of art and it is unfortunate that photographs have now superceded lithographs in scientific papers. Most of the bones illustrated are in multiple views, including both the proximal and distal ends of limb elements. Almost all of the bones look “perfect,” with no crushing and with few missing parts. While it is true that many bones do look much like the illustrations (e.g., tibia of Stegosaurus duplex), not all do. As Erwin Barbour (1890) has charged, some bones are less than perfect, but no hint of the imperfections have been given in the figures (dotted lines, etc.), except in a few (e.g., Plate 32). An example of a perfect bone that really isn’t, is a sauropod cervical vertebra shown in Plate 15. Barbour shows that the vertebra was not as complete as Marsh had illustrated (Barbour, 1890:fig. 1). Still, we may forgive Marsh for making the bones look more than perfect, after all Jim Madsen’s (1976) Allosaurus monograph as done the same thing.

Marsh’s Dinosaur as a reprint suffers from the usual problem of reprinting a book, namely the illustrations are not as good as the original. Most of the shadows are so dark as to appear black in some cases. Although this isn’t too much of a problem for many of the bones illustrated, it is for the skull of Diplodocus where details in the shadows are practically indiscernible (for some reason the skull images of Stegosaurus did not suffer the same fate). I do not understand why, with the advances in digital imagery, illustrations in any reprinted book are so poor.

Marsh’s Dinosaurs is a close, but not exact reproduction of the original. The frontispiece illustration is now black and white, rather than colored. Several illustrations that were large foldouts now have a binding sewn through them, for example Figure 3, map showing the location of quarries at Como Bluff and Plate 32, sauropod caudal vertebra.

So, should you buy the book? If you have an old copy of Marsh’s Dinosaurs, then no, the older copy is better. But if you are unlucky not to have one, then yes, it will make a good addition to your library, especially if you are working on sauropods or stegosaurs.

KENNETH CARPENTER
Department of Earth Sciences
Denver Museum of Natural History
2001 Colorado Boulevard
Denver, Colorado 80205

LITERATURE CITED


The Late Jurassic land-vertebrate fauna from Guimarota, Portugal stands as a unique, international treasure. A particularly important component of the fauna is the mammals, which have provided much insight to evolutionary steps within that group’s Mesozoic history. This monograph by Thomas Martin opens new vistas within the mammalian group known as the holotherians.

Holotheria includes a broad diversity of living and extinct forms unit-ed by ancestors having molars with the primary cusps arranged in triangular patterns (as seen in occlusal views) with apices of the triangles oriented in opposite directions between upper and lower teeth. Members of the Late Triassic–Early Jurassic Kuehneotheriidae are the most primitive known holotherians, and living marsupials and placentals are high-