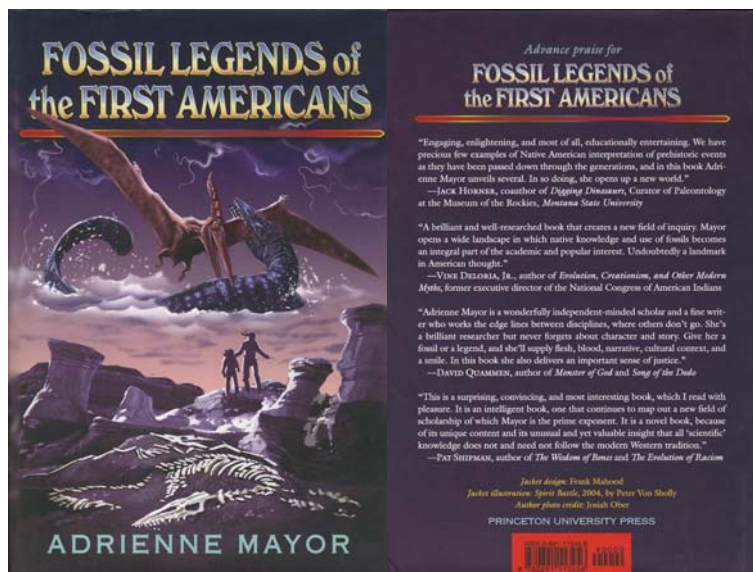


Mayor, A. 2005. *Fossil legends of the first Americans*. – Princeton, Princeton University Press

Book review by C. van Kooten



*“The burnt-red badlands of Montana’s Hell Creek are a vast graveyard of the Cretaceous dinosaurs that lived 68 million years ago. Those hills were, much later, also home to the Sioux, the Crows, and the Blackfeet, the first people to encounter the dinosaur fossils exposed by the elements. What did Native Americans make of these stone skeletons, and how did they explain the teeth and claws of gargantuan animals no one had seen alive? Did they speculate about their deaths? Did they collect fossils?” (Source: cover of ‘Fossil legends of the first Americans’).*

Adrienne Mayor is an independent scholar who writes about the scientific and historical realities embedded within myths. Her book ‘The first fossil hunters. Palaeontology in Greek and Roman times’(2000) was one of the first modern books to combine folklore and palaeontology. In this book Mayor describes how large fossil bones from extinct creatures were discovered and interpreted in ancient Greece and Rome. She pinpoints similarities between extinct fossilised animal remains and mythical creatures found in Greek and Roman mythology. For instance, the similarities between the mythical griffin and *Protoceratops*, a dinosaur found in the Gobi desert, are highlighted.

In Mayor’s new book ‘Fossil legends of the first Americans’, she continues along a similar line. However, this time she looks at how Native Americans came across fossilised remains, how they interpreted these discoveries, and how these new interpretations and ideas became entwined within Native American culture and folklore. The book discusses fossil traditions of a number of Native American cultures, including the Aztec, Iroquois, Zuni, Navajo, Apache, Cheyenne, Comanche, Pawnee, and Sioux. Mayor shows how fossilised bones and shells were used by Native Americans in medicine, as personal amulets and in hunting rituals. An interesting point Mayor makes on a number of occasions is that within a particular area, the mythological creatures in Native American folklore in that same area, show a striking resemblance to the fossilised remains. Mayor points out that the descriptions of the ‘Monster Bear’, ‘Stone Giants’ and ‘Thunder Birds’ show such similarities.

The book consists of an introduction, five chapters, a conclusion, and an interesting appendix. In the introduction, the discovery of an archaeological and palaeontological site, called ‘Big Bone Lick’ in Kentucky, is used to set the theme of the book. The reader goes back to 1739 to accompany a party of Frenchmen and Native Americans along the Ohio River and experiences western man’s first encounter with New World fossils. Furthermore, Mayor attempts to find out who really deserves credit for the historic discovery of the first New World vertebrate fossils to be studied by scientists. She does this by means of stories passed on through time by word-of-mouth, the combined knowledge of palaeontology, archaeology, anthropology and mythology, along with an extensive literature research.

The fossil stories in this book are organised into chapters, each of which deals with stories from the same region. These are: 1) the northeast of the US and the southeast of Canada; 2) New Spain/Mexico; 3) the southwest of US; 4) the central prairies and 5) the high plains.

In the final, concluding chapter, named ‘Common Ground’, Mayor sheds light on her own way of thinking concerning the ‘real’ importance of, as she refers to it, Native American fossil data. Doing so, Mayor clarifies two beliefs she has come to hold true during her research. Mayor likes the traditional methods used by

Native Americans in dealing with fossils to (p. 296) "...the stirrings of scientific inquiry in a pre-Darwinian culture". Furthermore, she concludes that the disrespectful manner in which western science has come to belittle Native American beliefs and ideals concerning the origin, meaning, and uses of fossils, is unjust. By means of her research, Mayor hopes to show that in several respects, the Native Americans were ahead of their time; early encounters with Euro-American naturalists proceeded in a friendly atmosphere of mutual information exchange, whereby both parties were able to learn from each other. However, time has taken its toll on the relationship between Native Americans and modern-day palaeontologists and scientists. Conflicting views and beliefs on how fossils are to be treated being one of the main points of contention.

The second general belief Mayor holds, is that the tensions between Native Americans and scientists can be dissolved and avoided; the atmosphere of their relationship could once more return to one of mutual understanding and respect. To this effect, Mayor spends the remainder of the concluding chapter presenting the reader with real-life case examples, mainly from the 20<sup>th</sup> century, of examples that bred contempt between Native Americans and scientists. Towards the end of the chapter, Mayor emphasises, that despite the vast cultural gap concerning the meaning and uses of fossils, a small number of modern-day Indian reserve projects and cooperative museum projects, show that traditional Native American views and modern palaeontological science can find a common ground.

As a final treat towards the end of her book, Mayor has added an amusing appendix named 'Fossil frauds and specious legends'. The appendix tells of five examples whereby fraudulent palaeontological items and historical objects and legends have come to light. Some of these items and legends were misinterpreted, thereby believed to be something they were not; others were intentionally 'set-up' to fool those eager enough to believe in them.

'Fossil legends of the first Americans' presents an interesting, intriguing and informative text, written in a fun, accessible way that will appeal to a wide audience, without scaring off the scientific community. The manner in which fossils legends and Native American tales are dealt with, is as novel as it is original. Even on a cursory read-through, it soon becomes apparent that Adrienne Mayor has based her book on a substantial amount of relevant, up-to-date and to-the-point research data, and as such commands the reader's indulgence. Having said this, I did find that on a number of occasions the vast number of names (*i.e.* of different tribes and cultures) mentioned in close succession, could be confusing at times. Even so, the views and ideals of each group of people, be it different tribes, cultures or scientists, are treated with respect and without condescendence. Furthermore, the clear and on occasion beautiful photographs, along with the sometimes-amusing illustrations throughout the book, add to its overall value, making it even more open to all. Overall, I would recommend 'Fossil legends of the first Americans' to all those whose interests go out to Native American history, palaeontology and legends, and not only to scientists in the field.

Mayor, A. 2005. *Fossil legends of the first Americans*. – Princeton, Princeton University Press. 446 pp. ISBN 0-691-11345-9. Price \$29.95 (hardcover).<sup>1</sup>

#### Cited literature

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<sup>1</sup> For a short account on this book by Adrienne Mayor herself, including some illustrations see Mayor (2005).