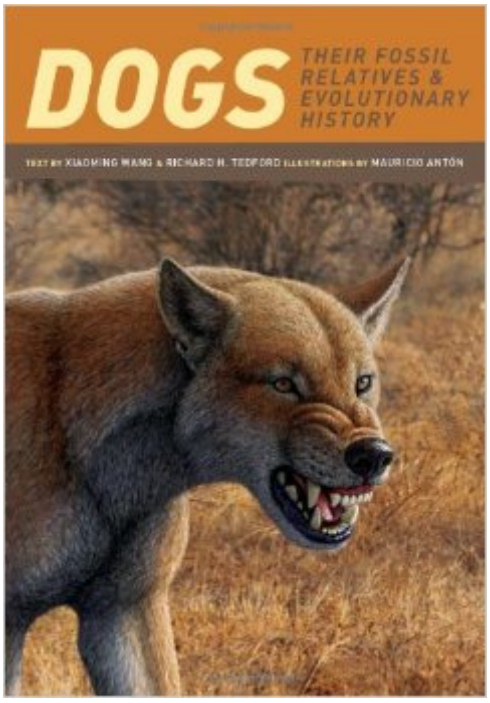
Dogs: Their Fossil Relatives And Evolutionary History



Synopsis

Xiaoming Wang and Richard H. Tedford have spent the past 20 years studying the evolutionary history of the family Canidae. Both are well known for having established the modern framework for the evolutionary relationship of canids. Combining their research with Mauricio AntÃ n's impeccable reconstructions of both extinct and extant species, Wang and Tedford present a remarkably detailed and nuanced portrait of the origin and evolution of canids over the past 40 million years. The authors cull their history from the most recent scientific research conducted on the vast collections of the American Museum of Natural History and other leading institutions. The fossil record of the Canidae, particularly those from their birth place in North America, are the strongest of their kind among known groups of carnivorans. Such a wonderfully detailed evolutionary history provides access to a natural history that is not possible with many other groups of carnivorans.With their rich fossil record, diverse adaptations to various environments, and different predatory specializations, canids are an ideal model organism for the mapping of predator behavior and morphological specializations. They also offer an excellent contrast to felids, which remain entrenched in extreme predatory specializations. The innovative illustrated approach in this book is the perfect accompaniment to an extremely important branch of animal and fossil study. It transforms the science of paleontology into a thrilling visual experience and provides an unprecedented reference for anyone fascinated by dogs.

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Customer Reviews

Dogs and their kin have an extensive fossil record, especially in North America. The authors have recently published three extensive technical monographs on fossil dogs, wolves, coyotes, foxes, etc. based on the unbelievably huge collections at the American Museum of Natural History and elsewhere. This book is essentially a popularization of the technical work, although this volume can be a bit technical in places. The authors cover the taxonomy of modern Canidae, the origin of carnivores, dogs, and numerous doglike mammals, anatomy, hunting and social activity (not only of modern dogs, but what can be interpreted from fossils), how the evolution of dogs is related to the last 40 million years of climate change, the migration of dogs from North American into the Old World, and a short chapter on domestic dogs. Included as appendices are listings of all 200 plus fossil and living Canidae species and an evolutionary tree base on the author's research.The artwork by AntÃ¶n is wonderfully done with his sketches rivaling his almost photographic looking color paintings in quality. AntÃ¶n previously has illustrated other books on vertebrate paleontology, including The Big Cats and their Fossil Relatives. Almost anyone who is interested in dogs and/or vertebrate paleontology should read this book. Natural History magazine has a short non-technical summary article by the authors in July-August '08 issue if you want a good preview. Dr. Wang has a wonderful website with links to much of his research and a pdf of the Natural History article.

This book encompasses everything that inspired me to pursue paleontological research...the meticulous manner in which the authors document the evolutionary history of dogs, and the unparalleled illustrations that bring those concepts and species to life. The paleontologists who wrote this book are authorities in their fields, and are much respected for the quality of their work. The price tag for the book is a huge understatement of its value. Be glad you are getting such a bargain for a priceless work, just short of picking the brains of the authors themselves!

This book is a great follow-up to The Big Cats and Their Fossil Relatives and like the forementioned it doesn't disappoint! Well researched, well written and accompanied by outstanding illustrations (Mauricio Anton really displays his talents as a reconstructive artist), this book is a treasure to anyone interested in carnivoran evolution. The list of pertinent reference books relating to mammalian evolution is an added bonus. I just wish it could go into more depth on many of the interesting species it reveals to us. A great introduction to canid evolution, you can't go wrong with this one!

As another reviewer put it, this book gave me much more than I expected. I have heard a lot said

about the derivation of the dog from the wolf many centuries or even millenia ago. The PBS show on the subject is one such program that comes to mind. But the evolution of dogs from a weasel-like ancestor over 35 million years ago? Who would have known that all but the last 3 million years of dog evolution happened right here in North America? The parallels between the hypercarnivore/generalist borophagines/canines of the Oligocene to Pliocene and the gorgonopsids/therocephalians of the late Permian are very intriguing.I have to give this volume fives stars because there is no other work that fills this gap in animal diversity. I will think of dogs differently from now on. What a fantasitic voyage through deep time to see the remote ancestors of dogs!

Our "best friend" has been with us for about 30,000 years and holds the title of being one of the first domesticated animal. If you go back even further in time to about 100,000 BP you might find the first lineage of the dog as it split off from the gray wolf. Of course, if you want the dog’s (carnivore’s) earliest ancestor you’d have to go back 65m or more YBP. This, then, is the subject of Xiaoming Wang’s incredible book. Wang is a noted paleontologist and geologist who just happens to be gifted writer. There’s a lot of information packed into this book (e-book), some of that information is quite technical, but all of it, technical or not, is very readable. The evolution of the dog is a fascinating story paralleling that of the cat and hyena and probably a few other carnivores as well. The author makes it all clear and covers, not only the dog, but a host of other creatures that shared this primeval world with the dog. You can’t really study an animal with out learning about it’s environment as well. To this end Wang fills you in on the geological and climatic changes that have occurred over the eons. You will also get glimpse of the dog’s hunting technics and social activities, using fossils and modern Canids as models. Migratory patterns, again using fossil locations, tell us how these versatile carnivores spread over the globe and changed to fit each new environment. This, at last, brings us back to the modern dog who has shared our camp fire for lo these many years. A few words about the art work: Mauricio Anton’s many line drawings and superb color plates round out this wonderful book and bring life to the extinct animals mentioned throughout the narrative. The color plates come across as black & white in my Kindle but spring into glorious full color HD life on my iPad. Look for the plates at the very end of the book, after the index. I had no technical problems with this Kindle edition.Last Ranger

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