

Vertebrates Fossils from Morocco, Prosperity or a Decadence?

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Fossils from Morocco can illustrate most of the history of vertebrate evolution, from the earliest known fishes of the end-Devonian (Fammanian:-365Ma) to the prolific Mio-Plio- Pleistocene sequences of Atlantic coast, which cover the last 6 millions years of vertebrate's history, throughout the oldest known terrestrial vertebrates of North Africa and the oldest known modern mammals and birds in Africa. Mesozoic fossils illustrate the rise and diversification of saurischian dinosaurs and contemporary faunas, including marine reptiles. The four global biotic crises that affect vertebrate's evolution could be documented by Moroccan fossils.

Considering this wealth of palaeontological data, one could expect that Morocco possesses important Museums and the most complete collections on vertebrate fossils. Nothing of the kind! Much worse, these fossils are left to the covetousness of dealers. Vertebrate fossils are commercially attractive and raise much private demand. Therefore entire regions are plundered and cleared of their fossils. Commercial dealers argue that they help peasant who make a living from selling fossils. In fact, they take advantage of them and sell fossils to the highest bidder. Moreover, the scientific significance of fossils is lost as soon as they are removed from their geological context.

Fossils offer significant educational opportunity. They are rare or unique and non-renewable. They must be protected and valorised as a source of sustainable development. No miraculous solution is available, but until efficient laws are proposed for stopping uncontrolled excavations, the creation of on-site museums, interpretation centres and collections of reference, as seen in all industrialised countries, should limit the damage of this systematic pillage. Scientists who often share the responsibility for public ignorance of fossils should provide more information to the public and thereby help in preserving this priceless heritage.

Key words: Palaeontology; Vertebrate; Heritage; pillage; Protection