



One of the largest mass extinctions in Earth history occurred at the end of the Cretaceous Period, about 66 millions of years ago (Mya). This extinction completely wiped out the hallmark group of the Mesozoic, the non-avian dinosaurs, and also severely affected other groups of vertebrates living on land. Its tempo (whether it was a rapid and catastrophic extinction or more gradual), worldwide synchronicity, and exact causes are still debated, mainly because the most complete fossil record of these events comes from the North American Western Interior and thus might narrate a local story instead of a general extinction scenario.

This paper reviews the European Late Cretaceous (100 to 66 Mya) fossil record, significantly improved in recent years by discoveries spanning from Sweden to Sicily, and from the UK to Russia. This record gives new insight into the last stages of dinosaur history in Europe. Similar patterns of vertebrate evolution, extinction, and survival are seen in both Europe and North America, particularly the rapid disappearance of dinosaurs at the end of the Cretaceous, thus supporting a common cause behind global sudden extinctions and preferential survivals at the Cretaceous-Paleogene boundary.

Moreover, because the European vertebrates lived in a tropical island archipelago, they offer valuable insights into the evolution of dinosaur-dominated ecosystems under restrictive, insular conditions.



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ISLAND LIFE IN THE CRETACEOUS – FAUNAL COMPOSITION, BIOGEOGRAPHY, EVOLUTION, AND EXTINCTION OF LAND- LIVING VERTEBRATES ON THE LATE CRETACEOUS EUROPEAN ARCHIPELAGO

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