

57III. AN OVERVIEW OF THE *ALLOSAURUS* FOSSIL-SITE OF ANDRÉS (UPPER JURASSIC), POMBAL, PORTUGAL

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The fossil site of Andrés, located in the Meso-Cenozoic Fringe of central-western Portugal, is an example of exceptional preservation of vertebrate fossils of the continental Upper Jurassic in the Iberian Peninsula. The abundance and diversity of remnants taken has allowed recognizing affinities between the vertebrate faunas of the continental Lusitanian Basin and synchronous deposits in North America. One of the most significant evidence of this similarity is the discovery of remains of, at least, two individual assigned to the theropod *Allosaurus fragilis*. This discovery was the first record of specimens of this species outside of North America and reinforced the previous hypothesis supporting the existence of favourable conditions for contacts between the faunas on both sides of the proto-North Atlantic sometime during the Upper Jurassic.

The Andrés beds belong to the Alcobaça Fm. (Lourinhá Group), late Kimmeridgian-lower Tithonian in age.

The preservation of fossils suggests a rapid burial and low transportation of the remains after death. Often, some bones, especially the cranial and appendicular elements of *Allosaurus*, show a preferential orientation and low degree of dispersion. The remains of *Allosaurus* are the commonest in the fossil-site but it is also identified many other representatives of the fauna. Semionontiform fishes and postcranial bones attributed to anurans are well represented. They are also common the cranial and postcranial bones of sphenodontians closely related to the genus *Opisthias*. Other common remains are cranial bones of, at least, two crocodyliform taxa, tentatively assigned to *Goniopholis* and a form closely related to *Theriosuchus*.

Pterosaurs are scarcely represented by several teeth. The dinosaur diversity is composed by at least seven different taxa, including some new cranial and postcranial material referred to *Allosaurus fragilis*. The abundant theropod teeth indicate the presence of, at least, a second small form, that could be attributed to a dromeosaurid theropod. Sauropod taxa are identified by isolated teeth and few postcranial bones. At least three different sauropod taxa are represented, including undetermined titanosauriform, diplodocid, and a form closely related to *Camarasaurus*. The ornithischian fauna is represented by camptosaurids and, probably dryosaurids ornithopods.

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