

After a 60 hour continuous coach journey from Rio you will reach the Northeast Brazil, where the Crato fossil beds are situated in the Chapada do Araripe. The Crato Formation is mined for cement production and paving slabs. It contains the Nova Olinda Member, which is a 0-13 metre fossil rich micro-laminated limestone, containing spectacular fossils.

The bottom waters of the Araripe Basin were devoid of oxygen, which prevented predation and aided preservation. Although some specimens were from aerial input, most appear to have been washed in from rivers and streams by flash flooding. The diversity and preservation of the fossils make this a Fossil Konservat Lagerstätte (internationally important) site.

The fossils are generally thought to be Early Cretaceous, Aptian age. They were preserved at a time of rapid changes in evolution and especially the interaction of plants and animals. At this exciting time the flora was changing from conifer and fern dominance to flowering plants and evolving insect interactions. Most groups of animals, insects, arachnids and plants are represented in the fossils. These include vertebrates dinosaurs, pterosaurs and crocodiles; a vast array of insects such as cockroaches, dragonflies and their nymphs; arachnids, such as spiders and scorpions; plants including conifers, ferns and the early diversification of flowering plants.

Fossils have been exported and exhibited in many museums, notably Brazil, USA, Germany, Japan and private collections. A change in the status of the area to a UNESCO Geopark has stopped fossil collection from the quarries. Scientific research on fossils housed outside Brazil is at present difficult because of disputes over ownership of Crato fossils in foreign museums. All the fossils in this collection were exported under licence for educational purposes by Brazil's National Department of Mineral Production (DNPM).