

Dinosaur Footprints in Central High-Atlas: Ichnodiversity, Restoration and Valorization.

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The majority of the traces of dinosaurs explored in our sector of interest and generally in all of Morocco suffer from continuous degradation

State of conservation: The state of conservation of the rock outcrop of Ibaqalliwn (Tabant) is good, the calcareous flagstone of the impressions is well consolidated and the footprints of the dinosaurs are well preserved.

The traces of dinosaur footprints in Iouaridine (Demnate) are in a bad state of conservation, they are imprinted on argillaceous flagstones with mud cracks. The polygonal dessicated sections are readily subject to deterioration and are detachable. These layers are thus vulnerable, their restoration and protection is urgently needed.

Restoration: The rocks and flagstones carrying the traces dinosaurs must be cleaned and restored. The restoration work completed in the commune of Rioja in Spain is a model of inspiration and is adaptable to the Moroccan layers. The procedure involves a certain number of techniques including cleansing, filling by silicones, resins containing microfine of alumine, azurine or glass beads.

Protection: The majority of the traces of dinosaurs of the central High-Atlas are printed in natural carbonated or argillaceous flagstones with mud cracks. The protection of these layers is must be urgently attended to. Fences would make it possible to appreciate the sites and meadows without trampling the traces, or causing their deterioration. Shelters would make it possible to protect the layers from the sunshine and erosion due to the run-off

The dinosaur layers constitute a national and international geological heritage. The state of advanced degradation is alarming, requiring study, restoration, protection and development. Valorization is carried out within the framework of the M'Goun geopark: a regional tool for valorization of the geological heritage, both natural and architectural, in order to generate beneficial socio-economic development projects involving the local population (geo- and eco-tourism attractions generating service sector employment: guides, restaurants, lodgings, hotel trades, soils products...).

Key words: Dinosaurs, Inheritance, Restoration, Valorization, High- Atlas