

PREFACE

Experiences and perspectives for the conservation of the paleontological heritage in Mexico

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In Mexico, paleontological heritage is defined as all those fossils that can be conserved, registered, investigated, and disclosed for society's benefit due to their qualitative and quantitative characteristics and attributes. Indeed, the first and critical step is the study of fossils to recognize these attributes.

However, the nature of the fossil record is fragmentary and incomplete. Only on some occasions we obtain complete specimens or parts of populations or communities for their study, providing evidence and hypotheses about organic evolution on our planet (Benton and Harper, 2009 and references therein). Currently, the intense rhythm of anthropic activity is altering or disappearing present and past habitats even before the specialist reach the site to do his work (Aguilar Arellano and Polaco Ramos, 2006; Corona-M., 2019).

In Mexico, the fossil record has both wide chronologies and a great paleobiodiversity represented. Their study is carried out by different groups of researchers attached to the educational and research institutions distributed throughout the national territory. The scientific production of these researchers allows us to overview the biological and geological evolution of the past and current territories.

These research experiences produced diverse strategies and proposals to conserve and protect paleontological assets. Some of them are previous to the existence of a legal framework from the 1990s to onwards and some later on (Aguilar and Porras Múzquiz, 2009; Aguilar Arellano, 2012).

Therefore, the fossil record acquires various meanings ranging from the scientific one where specimens are recognized as organisms; or those that represent multiple uses such as petroleum and limestones which are remnants of old forests and marine sediments transformed and commercialized. Other fossils have educational and social

meanings and even in some of them the level of social appropriation can derive in biocultural attributes, since they were recognized as part of the human past and incorporate these findings in the local culture. Then, the legal protection of fossil specimens has become more complex (Sanz, 2009; Bedolla and Corona-M., 2020).

In 2017, INAH (Spanish acronym of the *Instituto Nacional de Antropología e Historia*) as a Federal Government institution with legal attributes to preserve the fossil specimens and localities in Mexico, reactivate the Council of Paleontology to attend this situation. One of the aims approved by the Council is to produce articles for academic journals as the results of research, discussion, experiences exchange, and proposals to generate the regulations that allow the investigation, protection, conservation, and outreach of the paleontological heritage in Mexico (Aguilar Arellano, 2019).

The invited editors would like to thank Dr. Josep Anton Moreno Bedmar, editor-in-chief of "*Paleontología Mexicana*" to present this special issue named "Experiences and perspectives for the conservation of the paleontological heritage in Mexico". In this first part, we have the contribution related to the origin and development of the well-known paleontological collection at the *Facultad de Ingeniería, UNAM*. Another article presents the experience of the "*Museo de Paleontología Eliseo Palacios Aguilera*" to produce an inventory of the named geosites of paleontological in the Central region of Chiapas and the role of society for its conservation.

The INAH's Council of Paleontology recognizes the importance of specialists' exchange of knowledge and experiences since they produce strategies to protect and conserve sites and fossils. Also, add the efforts and interaction with the various social, cultural, and political actors related to this heritage. These dialogues will allow

generating experiences to understand the current regulatory and legal framework and to clarify the doubts produced by its application. The main expected results are a keen public consciousness and establish strong collaboration networks to preserve the country's paleontological heritage.

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