RUCHKYS, U., TRAVASSOS, L.E.P., RASTEIRO, M. A. & L. E. FARIA (EDS.), 2015: PATRIMÔNIO ESPELEOLÓGICO EM ROCHAS FERRUGINOSAS. PROPOSTAS PARA SUA CONSERVAÇÃO NO QUADRILÁTERO FERRÍFERO, MINAS GERAIS

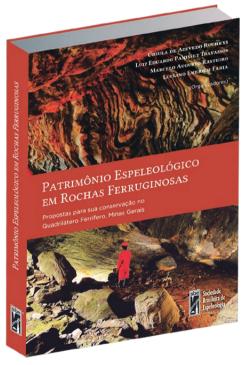
[SPELEOLOGICAL HERITAGE IN FERRUGINOUS ROCKS: PROPOSALS TO ITS CONSERVATION IN THE IRON QUADRANGLE, MINAS GERAIS]

Brazilian Speleological Society, 1st Edition, 346 pp.

This book was intended to gather all the speleological knowledge associated with the region of the Iron Quadrangle (Quadrilátero Ferrífero) and the region of the Southern Environmental Protected Area of the Metropolitan Region of Belo Horizonte, Minas Gerais, Brazil. The first printed edition (2,000 copies) is formatted in A4 size, with all imagens in color, and was distributed free also with a digital version, available to the speleological community.

For the book organization, the editors invited 27 authors with extensive knowledge and research skills within the study area

and the type of rock mention in the title. The book has 18 chapters covering three main aspects: 1) "The general context", 2) "The Speleological Heritage in ferruginous rocks" and 3) "Proposals for managing the Iron Quadrangle and the Southern Environmental Protected Area of the Metropolitan Region of Belo Horizonte". In the book presentation, one can observe the main idea of the book, which was the promotion of the speleological heritage (in general), and in ferruginous rocks (in particular) by propagating technical and scientific knowledge. The language used by the authors and the large quantity of graphic resources, allows the work to be read by anyone interested in the subject, not only by scientists.



The first part of the book was planned to show the reader what is karst in general and in traditional types of rocks, also showing the importance of iron and its use by human societies. This section is basically divided in six chapters, as follows: 1) Natural caves in ferruginous rocks: a book presentation; 2) History and importance of speleology; 3) Brief inventory of the speleological heritage; 4) Juridical protection of the speleological heritage; 5) Ferruginous formations and high value ore bodies, and 6) Economical importance of iron.

The second part of the book covers various fields of speleological knowledge associated to the ferruginous rocks aiming at presenting the fundamentals of this heritage in eight chapters: 1) Conflicts arising from iron ore production; 2) Geospeleology in ferruginous rocks: dimensional, morphological, hydrological and sedimentological aspects; 3) Genesis and development of underground natural cavities in iron formations; 4) Underground biota associated with ferruginous formations; 5) Paleontological records in a cave developed in iron formations in the Gandarela Ridge; 6) Archaeological Heritage in the fields and ferruginous media; 7) Scenic value, tourism and religion; 8) Geodiversity services

associated with ferruginous rocks: pressure and conservation opportunities.

The third and final part of the book, called "Proposals for managing the Iron Quadrangle and the Southern Environmental Protected Area of the Metropolitan Region of Belo Horizonte", was organized in four chapters in order to propose some guidelines for the better use and conservation of the speleological heritage in ferruginous rocks. The chapters are as follows, 1) Overview of the speleological heritage in the Iron Quadrangle; 2) Priority areas for the speleological heritage geoconservation in ferruginous rocks of the Iron Quadrangle; 3) Ferruginous caves in protected areas: guarantee of protection?, and 4) Management of the regional speleological heritage: guidelines, goals and recommendations for its conservation. As in the whole book, each chapter presents a satisfactory number of references, most of which are related to the ferruginous rocks.

Although the focus of the book is the speleological heritage in ferruginous rocks, the work presents relevant information about karst, history of speleology in Brazil, legal aspects involving this heritage and the different ways of managing this environment. This approach is of great importance because it demonstrates the value of such heritage and favors a better comprehension for both scientists, people with basic knowledge of caving, as well as the public. The book also can be used in environmental licensing processes in Brazil.

The main merit of the book is to be the first one bringing together various aspects of speleological heritage in ferruginous rocks. It is also the first Brazilian project that proposes to manage this type of heritage. With the discovery of cavities in such rocks, the research has been intensified, but it is still necessary to organize the spread information regarding its management.

The goal of the editors was achieved in great style, and one can congratulate the authors for being capable to write for a broad audience. I hope that this work could be able to inform all those involved in the management of speleological heritage, and the sustainable development.

Mariana Barbosa Timo