Visitors guide

THE EARTH. A HISTORY OF CHANGE



[1] Museums and Science

Science, with its modes of observation, its methods and techniques, has delved into the past, the present and the future of Earth. This exhibition aims at reflecting the known history of our planet.



[4] The Inhabitable Planet



The primitive Earth was devoid of atmosphere and water; its surface was hot, dry and lifeless. Nevertheless, life appeared in this environment with scant oxygen. Organisms capable of photosynthesis were the main factor in the progressive enrichment in oxygen of the atmosphere. The current abundance of oxygen is a result of life, not its cause.

Biological evolution led organisms to colonise a variety of environments, even those with extreme conditions. These organisms and their links to each other and to their



[2] The Origins of the Universe and of the Earth

The Earth is a complex object, a minute portion of the vast system of the Universe. The *big-bang* theory—developed in the late 1940s—suggests that the Universe started as an enormous explosion some 15,000 million years ago. Then galaxies, stars and systems such as the Solar System were born. The Earth, dating from about 4500 million years ago, is part of Solar System.

[3] Geological Change: the Dynamic Earth

The four main parts of the Earth system are the *Geosphere* (the solid part), the *Hydrosphere* (the liquid part), the *Atmosphere* (the gas envelop) and the *Biosphere* (the living organisms). These parts interact and produce continuous changes that will persist as long as there is matter and energy flow among them. This has been so since the origin of the planet, when the Earth began evolving physically, chemically and biologically. The positions of the continents have changed, as well as the global distribution

of oceans, climates, landscapes and the characteristics of plants and animals.

In the last forty years it has been shown that large fragments of the Earth's crust, called *plates*, are slowly but constantly moving, creating frictions and collisions that unchain earthquakes and volcanic eruptions, as well as compressions, rising and sinking of continents and ocean bottoms. The energy that drives these movements comes from within the Earth,

in the core of which very high temperatures prevail. The solid part of the Earth is composed of *minerals*, associated to form various *rocks* (igneous, sedimentary and metamorphic). The study of rocks allows us to read pages of the planet's past, remote and recent.

The locations of the continents and of the vast water masses, the oceanic currents and the atmosphere affect the climate, and the climate influences the environments and the distribution of living organisms.





physical environment are called ecosystems. Environmental diversity and biological evolution gave rise to the diversity of life or *biodiversity*, valued, among other things, as a reservoir of genetic richness. Fossils, that is, the remains of organisms that lived in the past, allow us to decipher the story of life on Earth.

[5] Biomes in Argentina

Biomes are the planet's major ecologic units. They are usually called after their predominant vegetation. Argentina is one of the countries with the larger variety of biomes.





[6] Human Beings as a Factor of Change

Homo sapiens made his appearance on Earth some 200,000 years ago. In that short period, human beings have brought about profound environmental changes. Now we stand for *sustainable development*, socio-economic growth in harmony with the systems supporting life on Earth. We aim at keeping all options and possibilities open for future human generations.



[7] The Museum and its Collections



The La Plata Museum started with the small collection of young Francisco Pascasio Moreno, who later became an outstanding self-educated scientist. The room starts a dialogue between Earth and the museum's visitors, with the aim of presenting a general view of our planet, its component elements and its place in the Universe.





THE LA PLATA MUSEUM



The Earth. A history of change is the beginning of the Museum's experience for the public and proposes visitors a dynamic and enriching contact with the institution. To that end, it presents evidence showing how present-day science creates knowledge and underlining the value of collections as records of vanished biodiversity.

The newly designed room focuses on showing our planet as a system of closely related components—man amongst them—belonging to a much larger system, the Universe. The interactive exhibits aim at stimulating the public's curiosity for natural history, which is also the subject of the remaining rooms of the Museum.

From simple to complex, from ancient to modern, from riddle to hypothesis and theory: this is the story shown over the hundred and fourteen years of the Museum's history spanned by the room. Also, it chronicles changes at the La Plata Museum. A journey that leads us to understand that our views on the past take shape beyond the mirror of the present, and that our views of the present will eventually, so to speak, move in the future beyond the mirror. The re-designed room was the end-product of a training seminar on preventive conservation and exhibition design in natural history museums. The seminar was organised by the Antorchas Foundation with support from the Smithsonian Institution. Museum scientists and technicians, as well as the seminar's instructors and students were in charge of the works. The Universidad Nacional de La Plata, with the help of the Antorchas and Bunge & Born foundations, provided the necessary financial means. Prints were provided by the Epson Argentina Foundation.





Visiting Hours

The Museum is open from Tuesday to Sunday, from 10am to 6pm, including holidays, except January 1st, May 1st and Christmas. It is open every day during the school winter holidays and on Mondays if these are holidays or the day before a holiday.

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