



## **Conservation and promotion of the geological heritage in the «Ile-de-France» region (France): Establishment of a decision support-tool based on inventory**

Elise Auberger (1), Jean-Pierre Gély (2), Patrick De Wever (3), and Didier Merle (4)

(1) CR2P (UMR 7207 - MNHN - CNRS - UPMC), Sorbonne Universités, Muséum national d'Histoire naturelle, Paris, France (aubergerelise@gmail.com), (2) LAMOP (UMR 8589 - CNRS), Sorbonne Universités, Paris, France (jeanpierre.gely91@gmail.com), (3) CR2P (UMR 7207 - MNHN - CNRS - UPMC), Sorbonne Universités, Muséum national d'Histoire naturelle, Paris, France (pdewever@mnhn.fr), (4) CR2P (UMR 7207 - MNHN - CNRS - UPMC), Sorbonne Universités, Muséum national d'Histoire naturelle, Paris, France (dmerle@mnhn.fr)

Based on an initiative by the “Regional Commission of Geological Patrimony” (CRPG), the French state and the regional government of Ile-de-France co-financed the setting up of an inventory with the aim of safeguarding geological sites of patrimonial interest. This project forms part of larger scale policies, at the national and European level.

Geological studies in the Paris region began as early as the 18th century, in the fields of cartography and paleontology. Later on, prominent scientists like G. Cuvier, A. Brongniart and A. d'Orbigny established the first concepts in sedimentology and stratigraphy through the description of Cenozoic fossil sites that rank amongst the richest in the world and geological formations in the Paris Basin. Eventually, later on, five historical stratotypes were established in the Ile-de-France region. Yet, at present, this geological heritage is constantly threatened by expanding urbanisation.

To conserve this diverse geological patrimony, we have set up a protocol composed of 4 main actions:

- i) The exhaustive and objective referencing of geological sites in Ile-de-France. This information is centralised in a database, which currently comprises 639 sites (mainly of anthropic nature such as quarries)
- ii) The pre-selection of sites (298 out of the initial 639) based on sufficient accessibility and potential geological interest.
- iii) The use of a method of description and hierarchisation - following the guidelines of the National Geological Heritage Inventory Program (INPG) - on the pre-selected sites.
- iv) Establishment of a schedule specifying actions of geo-conservation which will take into account the patrimonial value of the sites, but also their threats, their juridical status and the socio-economic context of the region. The purpose of this program is to conserve a collection of geological sites that reflect the totality of the regional geology in Ile-de-France.

The results of this study will be released to the general public and thus serving as a decision support-tool for government members, territorial administrations and non-profit organisations in the creation of projects of protection and promotion of the geoheritage.

This methodology will represent a reference for the management of the geological heritage in urban and peri-urban contexts.