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The National Geoheritage Inventory in France, from knowledge to outreach

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French Law 2002, art.411-5 (Environmental code)

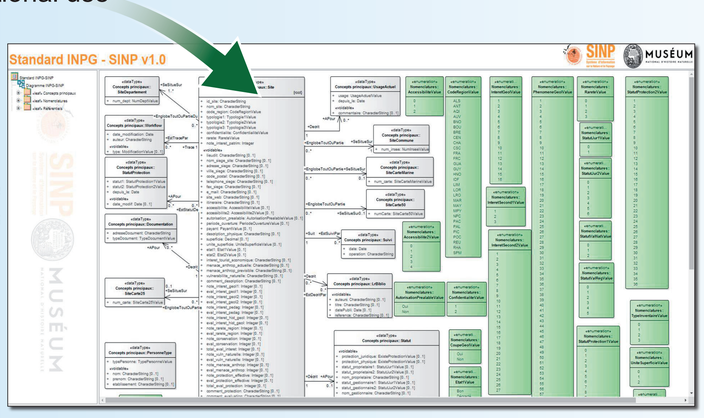
“ A natural inventory encompasses the inventory of the richness of ecological, faunistic, floristic, geological, mineralogical and paleontological richness. It also defines that the inventory should be conducted under the scientific responsibility of the National Museum of Natural History of France. ”

International declaration of the rights of the memory of the earth

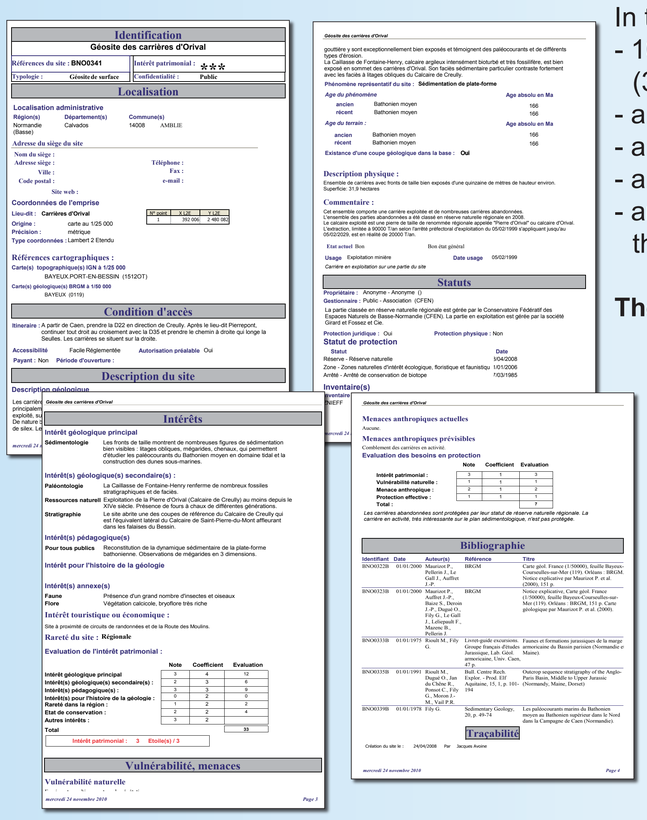
“ Article 6 - Just as an old tree keeps all the records of its growth and life, the Earth retains memories of its past... A record inscribed both in its depths and on the surface, in the rocks and in the landscapes, a record which can be read and translated. ”

Concept and methods

4 200 geosites included in the national database
2 650 geosites validated at national level
1 088 geosites available on the national website
500 people collaborating on the project
70 institutions involved
A national methodology published in French and in English
An exchange standard for national use
A national database



This diagram represents the program database and allows users to exchange program data.

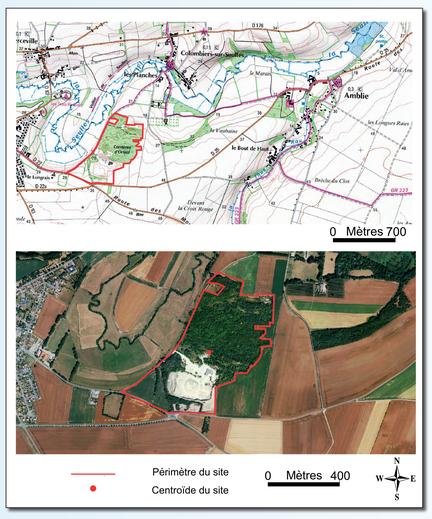


Example of a typical data sheet in the national inventory which allows a description and an evaluation of a geosite located in Normandy (north west of France). This geosite includes a set of quarries (old or still active), exploiting the heritage stone of Pierre de Caen. The main geological interest of this site is sedimentology.

In the database, one geological site means:
- 100 fields of information to be completed (30 mandatory)
- a GIS cartography
- a review of existing exsitu collections of objects
- a bibliographic review
- an evaluation of the patrimonial interest and the need of protection

The totality of this data are in free open access

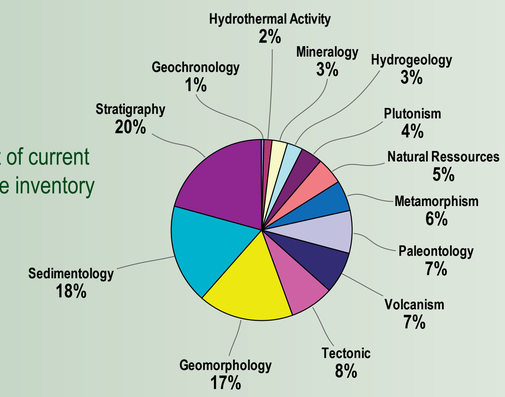
One site from Normandy:
Géosite des carrières d'Orival



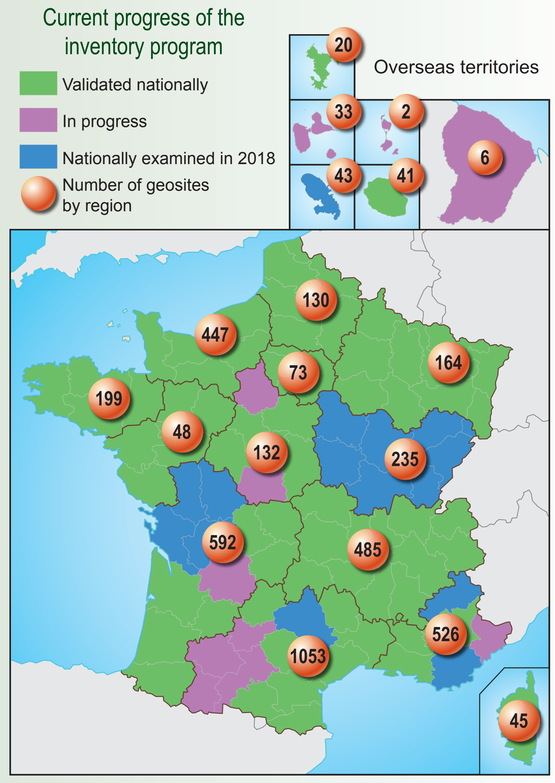
Pictures from the site: Géosite des carrières d'Orival

Progress

Main interest of current geosites in the inventory



Current progress of the inventory program



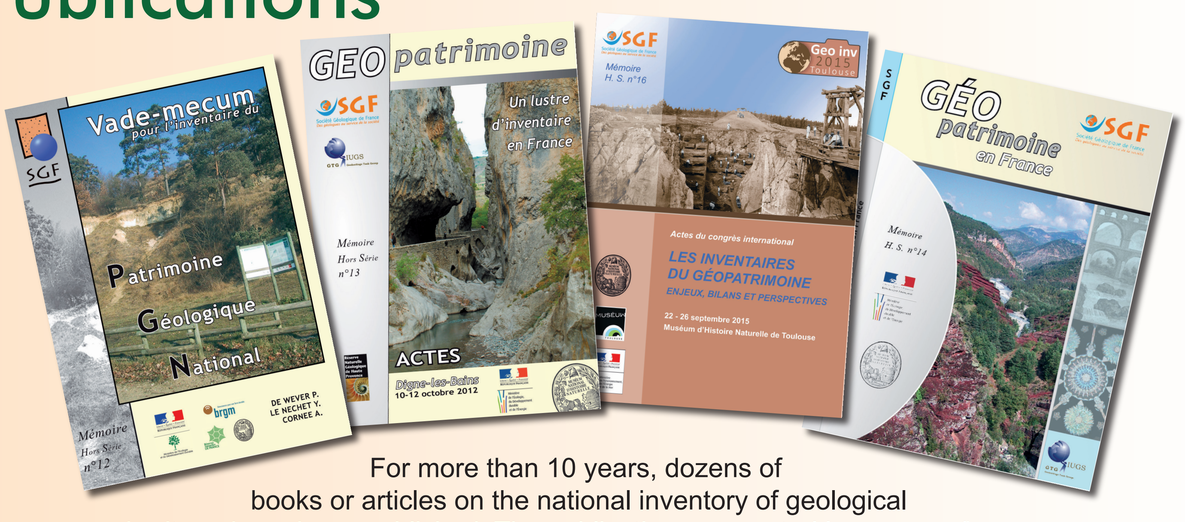
The national inventory of geological heritage in France is based on the most exhaustive selection of geological sites. The following table shows the geological interests currently used in the program and the future interests that will be added to the database.

Geological interests of the French Inventory	
Geochronology	Current
Geomorphology	
Hydrogeology	
Hydrothermal Activity	
Metamorphism	
Mineralogy	
Paleontology	
Plutonism	
Natural Ressources	
Sédimentologie	
Stratigraphy	
Tectonique	
Volcanism	
Travertine	
Waterfall	
Phosphatic karst	
Geochemistry	Future additions
Geophysics	
Collection	
Petrology	

INPN Inventaire National du Patrimoine Naturel https://inpn.mnhn.fr/accueil/recherche-de-donnees/inpg

The data fulfiling the conditions of national validation are published on the INPN website (National inventory of natural heritage) which is the official tool for disseminating data concerning "Nature". The INPN website is managed by the French National Museum of Natural History (MNHN).

Publications



For more than 10 years, dozens of books or articles on the national inventory of geological heritage have been published. The publications presented here come from a collection specifically dedicated to the geological heritage, with the support of the French Geological Society.

Perspective

- English translation for the exchange standard
- Create connexion with :
  - collection database (https://www.recolnat.org/fr/)
  - natural and biodiversity database (Natura2000 sites, ...)
  - GBIF database (https://www.gbif.org/)
  - IUGS database (http://geoheritage-iugs.mnhn.fr/)
- Create more connexion with Heritage Stone project

Bibliographical references

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