

Mayenne's soil cartography within everyone's reach, with geomayenne.fr!

Jean-Luc GAUQUELIN and Ingrid BRUGIONI

(Submission #157)

Abstract

Mayenne, a department located to the west of France, is a rural territory, with 76% of its area dedicated to agriculture.

In 1980, the Departmental Council of Mayenne started a soil cartography program at a scale of 1/10.000, for the 261 communes of the department (517 500 hectares). Since 1987, cartographic documents have been digitized for ease of use, but initially maps were printed on paper, being difficult to store and costly to produce, both in terms of labour and reproduction.

Since 2015, thanks to the implementation of the geomayenne.fr platform for the publication of geographic information, all maps and geographic data are available online to all actors (private, state agencies, communities, consultants, etc.). The 261 soil maps may be found in the map library and the associated data is registered and documented in the catalogue, in accordance with the INSPIRE Directive, and can be freely displayed or downloaded through OGC services. Thanks to this platform, the use of pedological data has been diversified and intensified, with more than 30 000 hits recorded per year.

The information provided by geomayenne.fr allows a good knowledge of Mayenne's soils and its functioning, which is vital for agriculture, the valorization of the territory, water quality and compliance with the regulatory framework by farmers and communities.

Maps and knowledge of soils characteristics help to address several environmental problems: - Young farmers are more aware of the potential of their land over time and can manage their farming and fertilization practices better. - Allow better control of transfers of pollutants to the various resources, for the valorization of agricultural and urban effluent applications. - Help to classify land and to adapt compensatory measures related to railway or road infrastructure works, in the context of land development. - Help define wetlands as part of the development of urban planning documents.

Soil is an essential element of sustainable development, for the services it renders to us: food or energy production, regulation, storage of water or carbon, water purification, reservoir of biodiversity. Their misuse leads to unavoidable disorders and costs for the coming generations. The public dissemination of soil data therefore makes sense to promote the protection of the environment!

Categories

Topic Area: *[1.1] Sustainable management of natural resources and natural capital*
Abstract Type: *Oral Presentation*