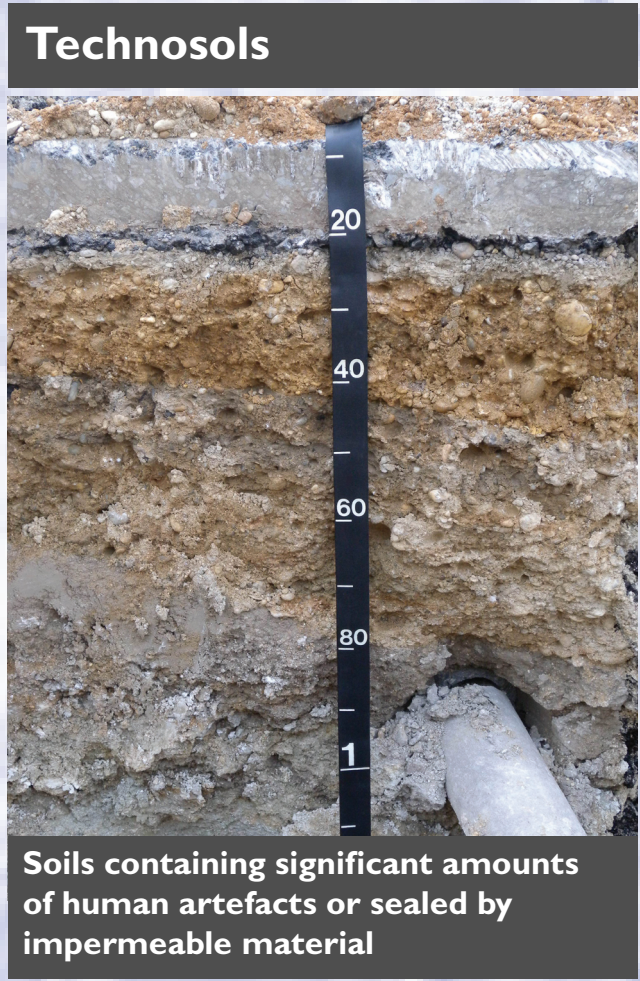
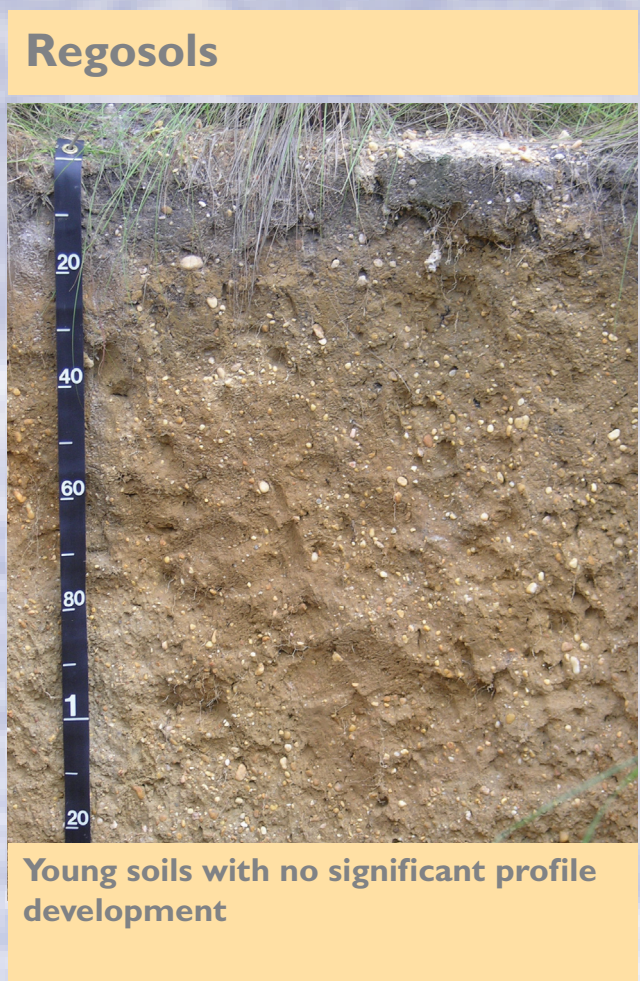
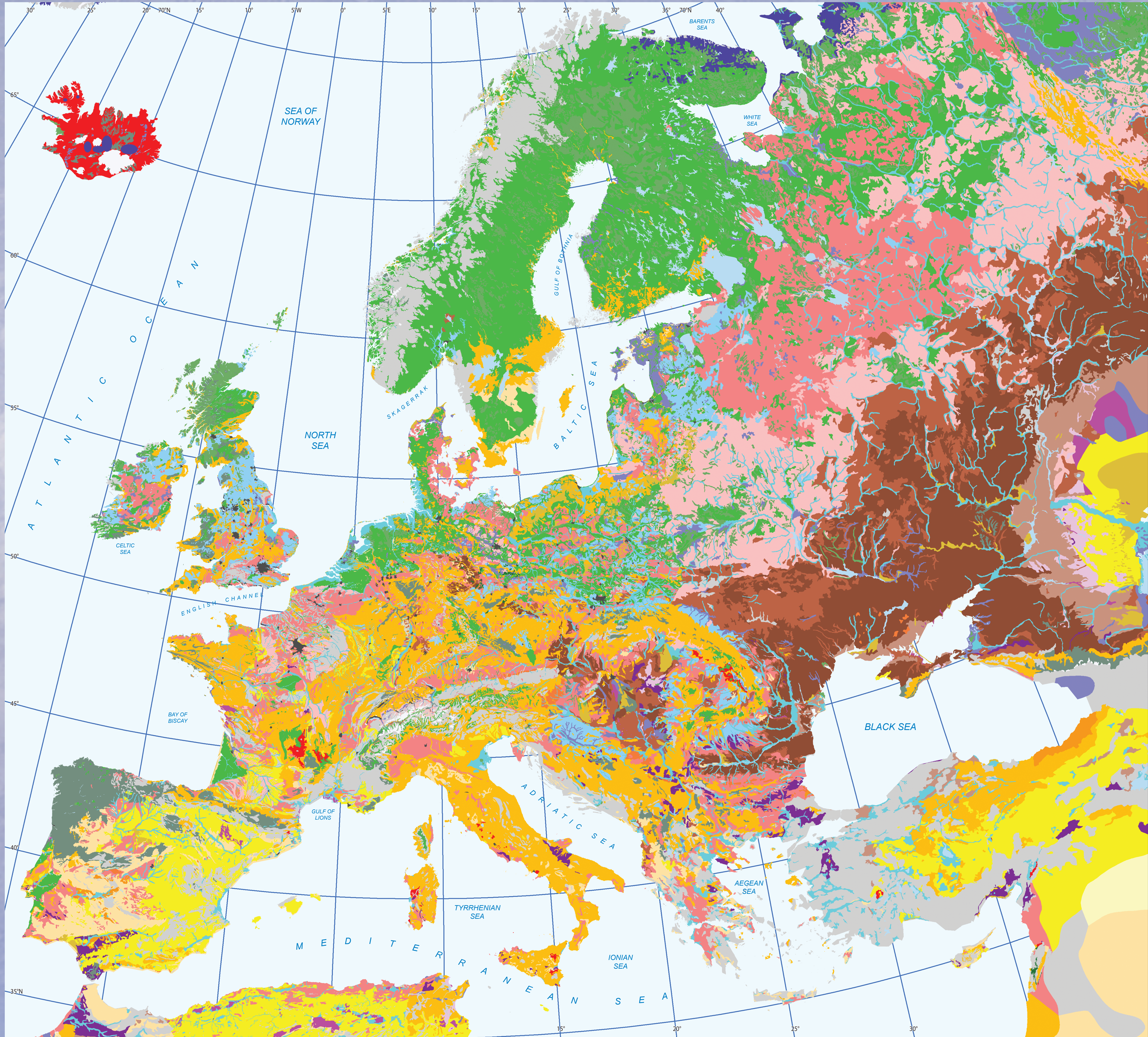
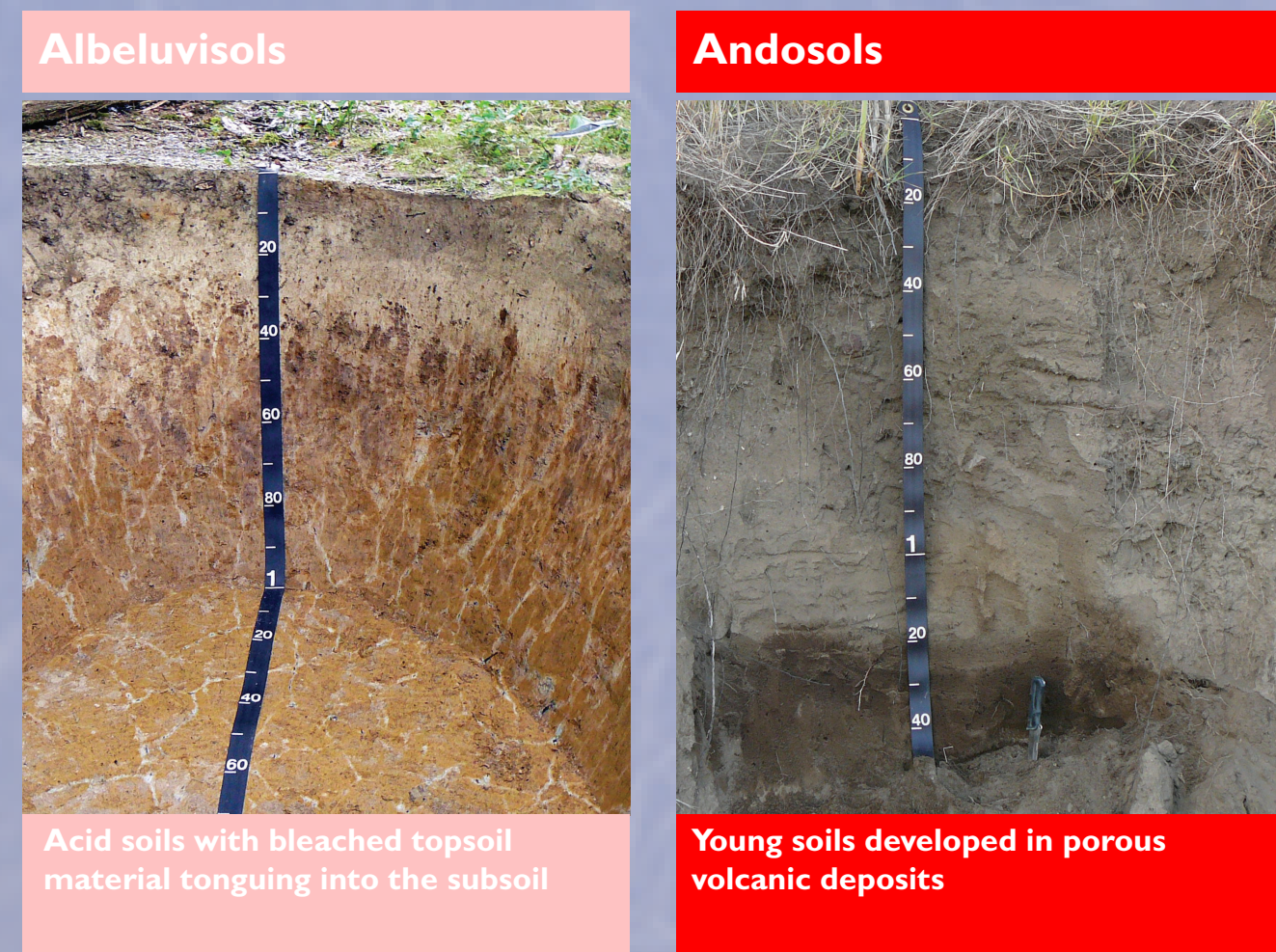




THE MAJOR SOIL TYPES OF EUROPE

Supporting the European Union's Thematic Strategy for Soil Protection



What is soil?

Soil is composed of mineral particles, organic matter, water, air and living organisms. It is an extremely complex, variable and living medium. Soils are the result of six main factors: parent material (rocks and sediments), climate, position in the landscape, vegetation, living creatures, time and the effect of people. The patterns shown on the map reflect variations in the intensity of the various soil forming factors from one region to another and explain why there are so many different types of soils in Europe. From the photographs on this chart, it is clear that soils have distinct colours which are due to the varying proportions of organic and mineral matter. If the soil is rich in organic matter then the soil is dark and vice versa. If the soil is rich in a specific mineral, such as iron oxide (red) or calcium carbonate (white), then the soil will reflect that colour.

Soil functions

Soil is defined as the uppermost layer of the Earth's crust and is the interface between the ground, air and water. Soil performs many vital functions: food and other biomass production, storage, filtration and transformation of many substances including water, carbon, nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Given the slow rate of soil forming processes, soil must be considered as a non-renewable resource and highly susceptible to land degradation pressures. Given the life-critical, socio-economic and environmental importance of soil functions, the European Commission has adopted a Soil Thematic Strategy with the objective to protect soils across the EU.

<http://ec.europa.eu/environment/soil/>

The Soil Map of Europe

The Soil Map of Europe shown in the centre of this poster is derived from the 1:1,000,000 scale Soil Geographical Database of Eurasia. The database is the result of a collaborative project involving all the European Union Member States and neighbouring countries through participation in the European Commission Joint Research Centre's European Soil Bureau Network (ESBN). The map shows a simplified representation of the diversity and geographical variability of the soil cover across Europe. The underlying database has been processed to extract the most dominant soil type for a particular unit of landscape. Each colour represents a specific type of soil (i.e. WRB Reference Group), examples of which are presented on this poster.

For more information on this map and how to find our more information about the soils of your area, please visit the JRC SOIL Action web site at:

<http://eussoils.jrc.ec.europa.eu/>

WRB Reference Soil Groups

The World Reference Base for Soil Resources (WRB) uses objective criteria derived from both field inspections and laboratory analysis to systematically classify different soil types into one of thirty two Reference Groups with specific characteristics denoted through the use of prefixes and suffixes. The WRB is meant to serve as a common denominator through which national soil classification systems can be compared and correlated.

<http://www.fao.org/ag/Ag/land/wrb/>

James, A.; Montanarella, L.; Micheli, E.; Saegert, O. and Jones, R.J.A., 2010. Major soil types of Europe. European Commission Joint Research Centre. Published by the European Union Publications Office, Luxembourg.

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The authors are grateful for all contributions and suggestions received in the production of this poster and in particular to Ian Dewdney for his graphical expertise. All soil photographs are from Erika Micheli apart from the Cryosols profile which was taken by Stanislaw Brozek. Poster designed and produced by Lovell Johns Ltd (UK) www.lovelljohns.com

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