Understand to protect

European Commission

EU GRASSLAND WATCH

Start exploring > https://ec.europa.eu/eu-grassland-watch/
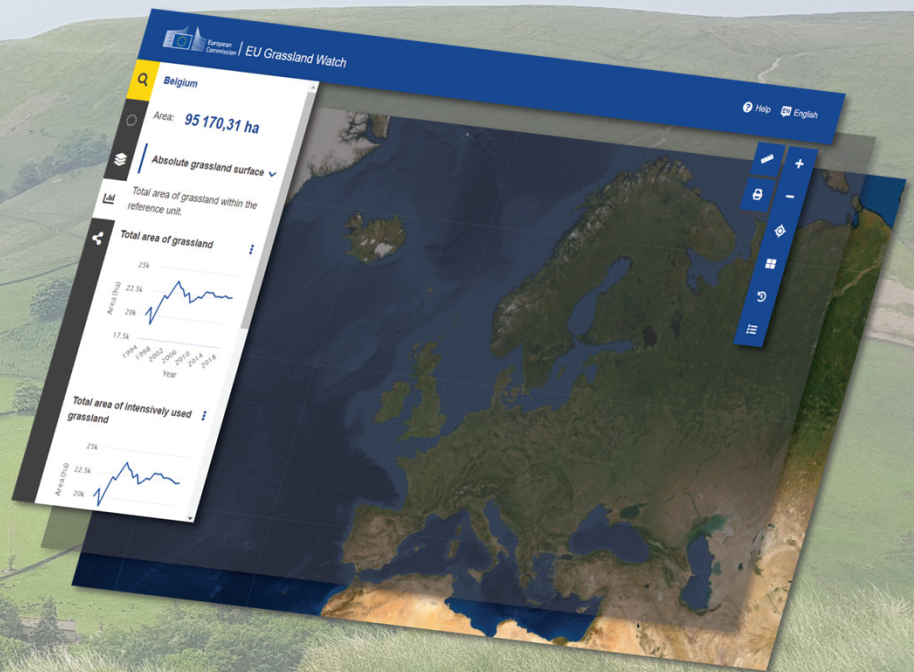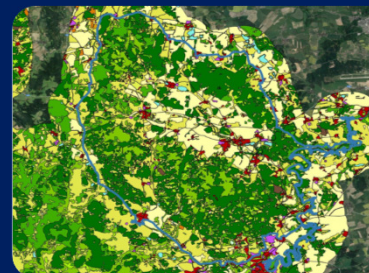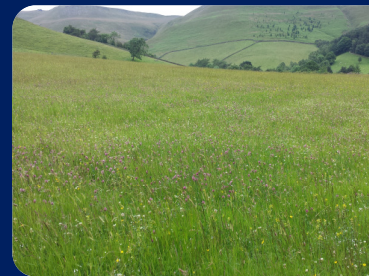
With EU Grassland Watch you can explore the evolution of grasslands in Natura 2000 sites.

Based on satellite data, EU Grassland Watch currently provides grassland information in 3689 Natura 2000 sites in 27 EU Member States. Covering the period from 1994 until the present, the information in this portal exploits a range of satellite image sources.

The key enabler for this service is the Copernicus programme, the European system for monitoring the Earth from space. At present, the portal covers Natura 2000 sites that were previously mapped in the frame of the Copernicus Land Monitoring Service providing additional temporal and thematic detail.

The portal exposes information on land cover / land use, grass biophysical properties, grass phenology and management practices on annual and sub-annual basis. For the mapped Natura 2000 sites users can explore grassland cover changes at land parcel, Natura 2000 site, regional, country and European levels.

space 4 environment   gisat   bil30mática   aniversario   SPECTO NATURA   Earth Observation Consultancy   umweltbundesamt   PERSPEKTIVEN FÜR UMWELT & GESELLSCHAFT
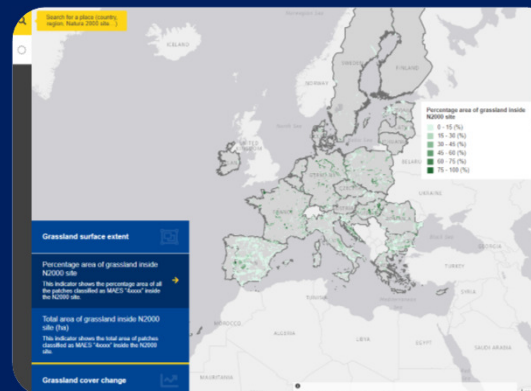
EU GRASSLAND WATCH

Optical images from Copernicus Sentinel-2 plus the US Landsat 8 satellites are used to both allow gap filling caused by clouds and snow and to extend the time series back to 1994. Copernicus Sentinel-1 synthetic aperture RADAR (SAR) is also used to support the mapping and monitoring processes from 2014 onwards.
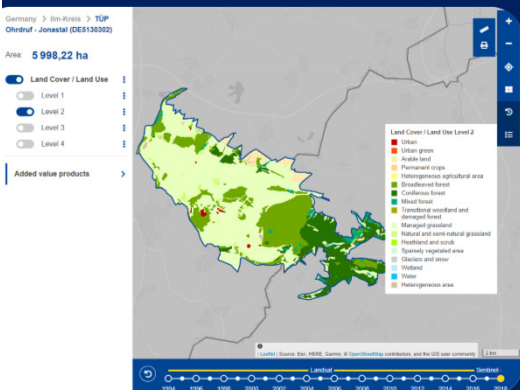

The Copernicus Land Monitoring Service (CLMS) provides a mapping product directly related to Natura 2000 sites and grasslands based on very high spatial resolution (VHR) imagery available for three reference years (2006, 2012 & 2018). EU Grassland Watch uses these products to support the processing of current and historical satellite images by providing the spatial framework and thematic reference objects.

The EO-based products are stored in a geospatial database and easily accessible to users and stakeholders via a web tool, the user-facing part of the EU Grassland Watch service. The webtool displays the results at a range of reporting levels to support stakeholders at local to European scales and will be updated at regular intervals.

At the site level the full range of land cover / land use, biophysical, phenology and management information can be accessed at the patch level. The spatial, temporal and thematic detail of the site can be examined by zoom functions and a time slider. A set of indicators summarises the site situation and shows changes over time.

The development of this portal was a pilot project financed by the European Parliament and undertaken by the contractors listed below. Further updates of the contents of this portal, including an increase in the number of Natura 2000 sites to be covered and further improvements in the information derived from remote sensing data, will take place in the near future.