

EUNIS wetlands habitat types, predicted distribution of habitat suitability - version 1, Nov. 2021

The modelled suitability for EUNIS wetlands habitat types is an indication of where conditions are favourable for the habitat type based on sample plot data (Braun-Blanquet database) and the Maxent software package. The modelled suitability map may be used as a proxy for the geographical distribution of the habitat type. Note however that it is not representing the actual distribution of the habitat type. As predictors for the suitability modelling not only climate and soil parameters have been taken into account, but also so-called RS-EVB's, Remote Sensing-enabled Essential Biodiversity Variables, like land use, vegetation height, phenology, and LAI (Leaf Area Index). Because the EBV's are restricted by the extent of the remote sensing data (EEA39 countries) the modelling result does also not go beyond this boundary.

Simple

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Point of contact	Organisation name	Individual name	Electronic mail address Website Role
	European Environment Agency		sdi@eea.europa.eu http://www.eea.europa.eu Point of contact
	European Environment Agency		sdi@eea.europa.eu Custodian

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No information provided.

Point of contact

No information provided.

Maintenance and update frequency	Not planned
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Habitats and biotopes
Keywords	
Keywords	
GEMET	<ul style="list-style-type: none"> natural area forest biodiversity habitat modelling forest terrestrial ecosystem
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> EEA39
Spatial scope	<ul style="list-style-type: none"> European
	<ul style="list-style-type: none"> Biodiversity

EEA topics	<ul style="list-style-type: none">• Soil• Water
Use limitation	EEA standard re-use policy: unless otherwise indicated, re-use of content on the EEA website for commercial or non-commercial purposes is permitted free of charge, provided that the source is acknowledged (https://www.eea.europa.eu/legal/copyright). Copyright holder: European Environment Agency (EEA).
Access constraints	Other restrictions
Other constraints	no limitations to public access
Spatial representation type	Grid
Distance	1 km
Language of dataset	English
Topic category	<ul style="list-style-type: none">• Biota



Begin date	1940-01-01
End date	2017-12-31
Coordinate reference system identifier	EPSG:3035
Distribution format	<ul style="list-style-type: none"> • GDB (1) • Geopackage ()

OnLine resource	Protocol	Linkage	Name
	EEA:FILEPATH	https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_1_km_eunis-hab-q_p_1940-2017_v01_r00/	
WWW:URL	https://sdi.eea.europa.eu/data/917348e8-42ea-4df9-8fe8-4d47bcd8d241		Direct download
ESRI:REST	https://bio.discomap.eea.europa.eu/arcgis/rest/services/EUNIS/MosaicSuit_Wetlands/ImageServer		
OGC:WMS	https://bio.discomap.eea.europa.eu/arcgis/services/EUNIS/MosaicSuit_Wetlands/ImageServer/WMS?request=GetCapabilities&service=WMS		
WWW:DOWNLOAD-1.0-http--download	https://sdi.eea.europa.eu/catalogue/srv/api/records/917348e8-42ea-4df9-8fe8-4d47bcd8d241/attachments/Distribution%20and%20habitat%20suitability%20maps%20of%20revised%20EUNIS%20N.%20Q%20formationsv2%20final.pdf?approved=true		Distribution and habitat suitability maps of revised EUNIS coastal and wetland habitats
WWW:LINK-1.0-http--link	https://maps.eea.europa.eu/EEAViewer_Portal/?appid=50d96e09fb8545369e202c0b5eb351d4&Plot=Q21&Suit=Q21&zoomto=true		web map

OnLine resource

No information provided.

Hierarchy level	Dataset
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Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification

Statement

The database compiled for the Braun-Blanquet project is a compilation of various national and regional vegetation databases. The maintenance of these databases is in principle in the hands of the custodians. However, before uploading the databases into Braun-Blanquet database a quality check is performed by Alterra and Masaryk University. If possible, detected errors are corrected and reported back to the data provider.

For the modelling of the habitat suitability map the Maxent software is used (<http://www.cs.princeton.edu/~schapire/maxent/>). The grid values in the map represent the probability (ranging from 0-1) that the cell is suitable for the habitat.

The grid file represents the habitat suitability of the EUNIS type. For the modelling the widely used software Maxent for maximum entropy modelling of species' geographic distributions was used. Maxent is a general-purpose machine-learning method with a simple and precise mathematical formulation, and has a number of aspects that make it well-suited for species distribution modelling when only presence (occurrence) data but not absence data are available (Philips et al. 2006). Because EUNIS habitats have a particular species composition, they are assumed to respond to specific ecological requirements, allowing us to generate correlative estimates of geographic distributions. Modelling habitats that have been floristically defined is a well-known procedure for ecological modelling at local scales, and a promising technique to be applied also at the continental level.

The Maxent method considers presence data (known observations of a given entity) and the so-called background data. Background data comprise a set of points used to describe the environmental variation of the study area according to the available environmental layers. It is assumed that these layers represent well the most important ecological gradients on a European scale. As layers the following environmental parameters have been used: Potential Evapotranspiration, Topsoil pH, Solar radiation, Temperature Seasonality (standard deviation *100), Mean Temperature of Wettest Quarter, Annual Precipitation, Precipitation Seasonality (Coefficient of Variation), Precipitation of Warmest Quarter & Distance to water (rivers, lakes, sea) and the RS-EBV's (Remote Sensing-enabled Essential Biodiversity Variables) Inundation; occurrence, Phenology; End of Season (day number), Phenology; Length of season (days), Phenology; Low of season (day number), Phenology; NDVI mean, Phenology; NDVI seasonality, Phenology; Peak of season (day number), Phenology; Start of Season (day number), Vegetation height (m). For more information on the RS-EBV's see the document "Description of European RS-EBV's and abiotic site conditions" provided with the dataset.

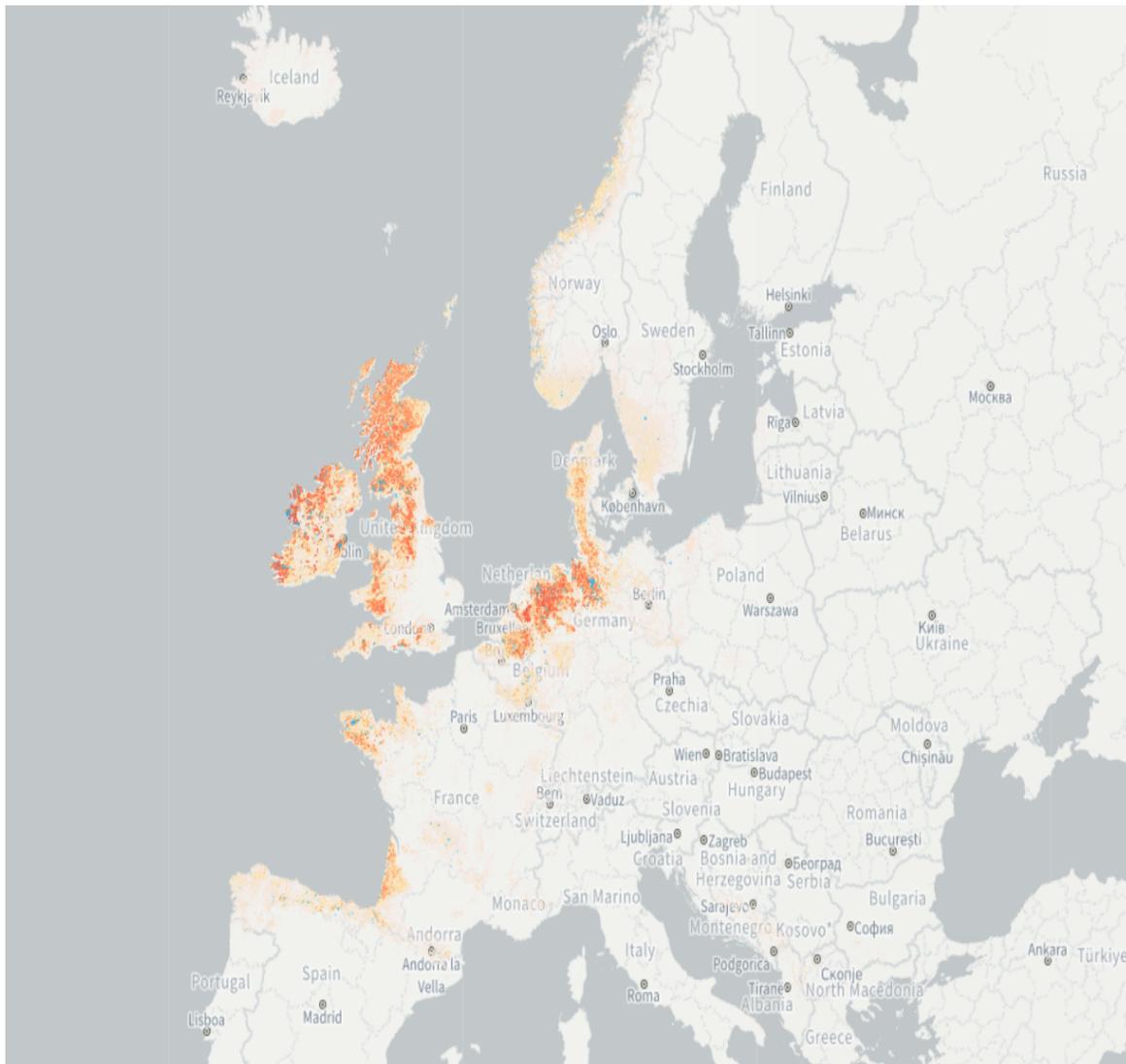
Source

- [EUNIS wetlands habitat types, distribution based on vegetation plot data - version 1, Nov. 2021](#)

Metadata

File identifier	917348e8-42ea-4df9-8fe8-4d47bcd8d241 XML		
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Hierarchy level	Dataset		
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Metadata standard name	ISO 19115/19139		
Metadata standard version	1.0		
Metadata author	Organisation name	Individual name	Electronic mail address Website Role
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Overviews



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