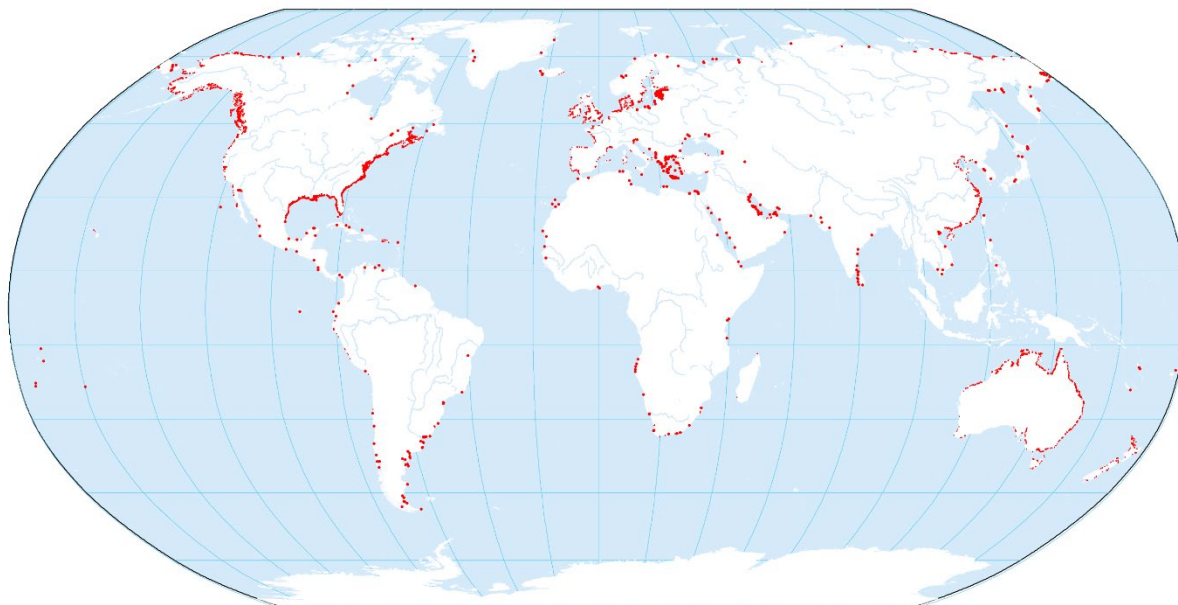


## Global Distribution of Saltmarsh



### Description:

**This dataset displays the extent of our knowledge regarding the distribution of saltmarsh globally, drawing from occurrence data (surveyed and/or remotely sensed).**

### Citation:

Mcowen C, Weatherdon LV, Bochove J, Sullivan E, Blyth S, Zockler C, Stanwell-Smith D, Kingston N, Martin CS, Spalding M, Fletcher S (2017). A global map of saltmarshes (v6.1). *Biodiversity Data Journal* 5: e11764. Paper DOI: <https://doi.org/10.3897/BDJ.5.e11764>. Data DOI: <https://doi.org/10.34892/07vk-ws51>

### Data collection date:

1973 - 2015

### Geographic range:

Global

### Supplementary information:

Attribute table: Automatically generated number (OBJECTID); Unique ID distinguishing the data entry (LAYER\_ID); Metadata ID linking to the source of the dataset, found in the associated metadata table (METADATA\_ID); English name of the feature as provided by the data provider (NAME); Name of the feature as provided by the data provider in original language (ORIG\_NAME); Local definition of feature as provided by the data provider (LOC\_DEF); Scientific (Latin) name(s) of family, genus and species (FAMILY, GENUS, SPECIES); Reported area in square kilometres (REP\_AREA\_KM2); Area calculated using GIS, in square kilometres (GIS\_AREA\_KM2); description of whether data have been obtained through remote sensing and/or field survey (DATA\_TYPE); data gathering approach (SURVEY\_MET); start and end date of data collection (of survey), supplied as text in the format YYYY-MM-DD (ISO date format) (START\_DATE, END\_DATE); character code that identifies accuracy of dates used in START\_DATE and END\_DATE to the nearest day(s), month(s), or year(s) (DATE\_TYPE); verification by government or expert (VERIF).

**Purpose of creation:** This dataset was developed to provide a baseline inventory of the extent of our knowledge regarding the global distribution of saltmarshes, which are ecosystems located in the intertidal zone of sheltered marine and estuarine coastlines. These ecosystems comprise brackish, shallow water with salt-tolerant plants such as herbs, grasses and shrubs, and are commonly found at temperate and high latitudes. Saltmarshes are of ecological importance as they underpin the estuarine food web. In particular, saltmarshes serve as nesting, nursery and feeding grounds for numerous species of birds, fish, molluscs and crustaceans, including commercially important fish species such as herring (*Clupea harengus*), and are also home to a number of Endangered and Critically Endangered species.

**Creation methodology:** The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) collated and integrated saltmarsh occurrence datasets from 50 data providers globally (see "SOURCE\_ID" in the metadata table), with support from Conservation International and The Nature Conservancy.

This composite dataset was sourced from peer-reviewed articles, reports, and databases created by non-governmental and governmental organisations, universities, research institutes, and independent researchers globally. Data sources are listed in the accompanying file, "WCMC027\_Metadata\_v6\_1.dbf", which can be linked to the layers using the unique metadata ID field ("METADATAID"). Where available, detailed descriptions of these datasets (e.g., time of data collection, source, resolution, and methods of processing) were documented in the dataset and accompanying metadata table.

Data were collected using remote sensing and field-based survey methods, with data quality ranging from high-resolution maps to low-resolution representations.

**Version:** 6.1 (March 2021)

**Data lineage:** **Version 6.1 (March 2021):**

PARENT\_ISO and ISO3 (ISO 3166-3 character code of country or territory where the feature is located) and SUB\_LOC (ISO 3166-2 sub-national code) were removed. The fields PROTECT (binomial value indicating whether the feature occurs in an area protected), PROTECT\_FEAT (feature protected by law or by any other conservation measures) and PROTECT\_STAT (measure that protects the feature) were removed.

**Version 6.0 (June 2018):**

Geographic attributions (ISO3 and Parent ISO3 codes) of points and polygons in the datasets have been matched to the World Vector Shoreline Plus and VLIZ World EEZ v10 geographic layers. This improves the accuracy of these datasets for national and regional studies. ISO3 codes need to be updated regularly due to codes becoming obsolete or EEZ boundaries being adjusted. Multipart points and polygons features were created to reduce the complexity of the attribute tables, merging those with identical attributes. This reduces the processing power required to handle the data while maintaining the level of detail required. The habitat datasets have been quality checked for obsolete ISO3 codes, overlapping claims identified and "Not Reported" consistently used for missing values rather than NA or blanks.

**Version 5.0 (December 2017):**

Standardises the feature and metadata attributes using a new schema, which aligns the attributes used across the habitat datasets curated by UNEP-WCMC. The updated attribute schema is outlined in "Supplementary Information." Specific changes include the addition of information on level of protection (e.g. PROTECT, PROTECT\_FEAT, PROTECT\_STAT), indication of whether the data have received expert or government verification (VERIF), and information on the start and end dates of data collection (i.e. START\_DATE, END\_DATE). The new schema will be used to inform a set of quality indicators, assessing changes in data quality over time.

**Version 4.0 (March 2017):**

Total global saltmarsh extent captured in the dataset equates 5,495,089 Ha (54,951 sq km; 350,985 polygons), collated from 50 data providers (e.g., governmental organisations, research institutes, universities, researchers). Spatial coverage is documented for 43 countries (polygon), with saltmarsh presence in an additional 56 countries documented in the point shapefile. Version 5 has updated the version 4 dataset to the new schema for attributes and metadata now used by the WCMC.

This dataset supersedes four previous versions, the first three of which were not published, and were used only under formally authorised agreements. A 2009 layer was collated by the The Nature Conservancy (version 1.0). This was incorporated into a subsequent version collated by UNEP-WCMC and Conservation International in 2013 (version 2.0). In version 3.0 of the dataset, 4,555,882 Ha (45,559 sq km) of saltmarsh globally were captured (326,040 polygons).

**Category:** Biogenic habitat

**Keywords:** coastal, blue carbon, saltmarsh, estuarine, habitat, ecosystem

**Similar datasets:** None

**Limitations:** This dataset is indicative of our current knowledge of the extent of saltmarshes globally based on the data obtained through the inventory, and is not intended to reflect a comprehensive assessment of saltmarsh presence and absence. The dataset is not suitable for temporal analyses of change. Please ensure that the time frames of data collection (noted within the dataset) are suitable for analytical purposes.

All spatial analyses should be conducted using the polygon layer distributed in this dataset. The point layer is included for reference purposes only, with useful information regarding wetlands of international importance designated under the Ramsar Convention and site-specific species information (linked to the accompanying Access database through the 'LOCRECID' field). Although mangrove data are not included in the dataset, mangrove habitat may be found in very close proximity to saltmarsh habitat in subtropical and tropical regions. The dataset may contain other habitat types such as freshwater marshes, mudflats and salt plains due to varying collection and mapping methodologies. Source-specific definitions of 'saltmarsh,' where available, are included in the accompanying "Metadata\_Saltmarsh.dbf" table.

**IMPORTANT:** As the dataset contains overlapping polygons, a dissolve operation (within GIS) is required before calculating area of extent.

Maintenance frequency:	Data are updated in intervals that are uneven in duration.		
Main access/use constraint:	Creative Commons Attribution-NonCommercial 4.0 (CC BY-NC 4.0). See <a href="https://creativecommons.org/licenses/by-nc/4.0/">https://creativecommons.org/licenses/by-nc/4.0/</a> for details. Free to (1) copy and redistribute the material in any medium or format, (2) remix, transform and build upon new material. You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. You may not use the material for commercial purposes.		
Organisation type:	Custodian		
Contact Organisation:	UN Environment Programme World Conservation Monitoring Centre		
City:	Cambridge, UK		
E-mail:	<a href="mailto:oceanplus@unep-wcmc.org">oceanplus@unep-wcmc.org</a>		
Data format(s):	Vector (polygon); WMS; KML (.kml); Vector (point); Access database;	Dataset size (uncompressed):	2.11 GB
Webpage and/or download:	<a href="https://doi.org/10.34892/07vk-ws51">https://doi.org/10.34892/07vk-ws51</a>		
Web map service:	<a href="http://www.arcgis.com/home/webmap/viewer.html?useExisting=1&amp;layer_s=5e53621170494edab5a1970ffa61a313">http://www.arcgis.com/home/webmap/viewer.html?useExisting=1&amp;layer_s=5e53621170494edab5a1970ffa61a313</a>		
Factsheet:	<a href="http://wcmc.io/saltmarsh">http://wcmc.io/saltmarsh</a>		
Resolution, scale:	Between 1:10,000 to 1:4,000,000 (largely 1:10,000 - 1:100,000)	Reference system:	WGS 1984
West bounding:	-180	East bounding:	180
South bounding:	-90	North bounding:	90
Metadata standard:	UNEP-WCMC Specific	Date of metadata:	26/03/2021