

Package ‘eunis.habitats’

July 11, 2023

Type Package

Title EUNIS Habitat Classification

Version 0.1.0

Description The EUNIS habitat classification is a comprehensive pan-European system for habitat identification

<[https:](https://www.eea.europa.eu/data-and-maps/data/eunis-habitat-classification-1)

[//www.eea.europa.eu/data-and-maps/data/eunis-habitat-classification-1](https://www.eea.europa.eu/data-and-maps/data/eunis-habitat-classification-1)>.

This is an R data package providing the EUNIS classification system.

The classification is hierarchical and covers all types of habitats from

natural to artificial, from terrestrial to freshwater and marine. The

habitat types are identified by specific codes, names and descriptions and

come with schema crosswalks to other habitat typologies.

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Encoding UTF-8

LazyData true

RoxygenNote 7.2.3

Imports tibble

Depends R (>= 2.10)

URL <https://github.com/ramiromagno/eunis.habitats>,

<https://rmagno.eu/eunis.habitats/>

BugReports <https://github.com/ramiromagno/eunis.habitats/issues>

NeedsCompilation no

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crosswalk	<i>Convert habitat codes</i>
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Description

Convert (crosswalk) habitat codes from, and to, the following habitat classification systems:

- EUNIS habitat classification: "EUNIS_2012", "EUNIS_M_2019", "EUNIS_M_2022" and "EUNIS_T_2021". See [eunis_habitats](#) for these habitat codes, names and descriptions.
- European Red List of Habitats: "RL".
- Habitats Directive Annex I: "Annex_I".

Note that not all pairwise combinations are available. The possibilities are those originally provided in EUNIS raw data.

Usage

```
crosswalk(code, from, to, unnest = FALSE)
```

Arguments

code	A character vector of habitat codes. These values should be existing codes in the classification system indicated in the <code>from</code> parameter.
from	The source classification system. Should be one of: "EUNIS_2012", "EUNIS_M_2019", "EUNIS_M_2022", "EUNIS_T_2021", "RL" or "Annex_I".
to	The target classification system. Also, one of the options indicated in <code>from</code> parameter description.
unnest	Whether to unnest the "to" column in the output. Note that if you do <code>unnest</code> then the number of rows in the output will be (potentially) greater than the number of habitat codes provided in the parameter <code>code</code> , meaning that the one-to-many crosswalks will be on one row each.

Value

A [tibble](#) of two variables with the `from` and `to` codes, respectively. The actual column names will vary according to the specific crosswalk queried, see Examples.

Examples

```
# From EUNIS 2012 to EUNIS Marine 2022
crosswalk(
  code = c("A3.4", "A3.5"),
  from = "EUNIS_2012",
  to = "EUNIS_M_2022",
  unnest = TRUE
)

# From EUNIS Marine 2019 to EUNIS 2012
crosswalk(
  code = c("MH152", "MH2331"),
  from = "EUNIS_M_2019",
  to = "EUNIS_2012",
  unnest = TRUE
)

# From EUNIS Marine 2022 to Red List
crosswalk(
  code = c("MH152", "MH2331", "MA146", "MD55"),
  from = "EUNIS_M_2022",
  to = "RL",
  unnest = TRUE
)

# From EUNIS Marine 2019 to Annex I
crosswalk(
  code = c("M", "MA1", "MA11", "MA12"),
  from = "EUNIS_M_2019",
  to = "Annex_I", unnest = TRUE
)

# From Annex I to EUNIS Marine 2019
crosswalk(
  code = c("8330", "1160"),
  from = "Annex_I",
  to = "EUNIS_M_2019", unnest = TRUE
)

# From EUNIS Terrestrial 2021 to Annex I
crosswalk(
  code = c("U51", "U72", "Q25"),
  from = "EUNIS_T_2021",
  to = "Annex_I", unnest = TRUE
)

# From Annex I to EUNIS Terrestrial 2021
crosswalk(
  code = c("91E0", "92A0", "9030"),
  from = "Annex_I",
  to = "EUNIS_T_2021", unnest = TRUE
)
```

eunis_habitats

EUNIS Habitats

Description

A data set of the EUNIS habitats. Each row is an habitat.

The EUNIS habitat classification is a comprehensive pan-European system for habitat identification. The classification is hierarchical and covers all types of habitats from natural to artificial, from terrestrial to freshwater and marine. The habitat types are identified by specific codes, names and descriptions and come with cross-walks to other habitat typologies. See [crosswalk\(\)](#) for mapping between habitat classification systems.

Format

A [tibble](#) of eight variables:

`classification` Classification identifier. Identifies one of the four habitat classifications.

`section` Component of the EUNIS classification: "marine" or "terrestrial".

`version` Classification version.

`group` Habitat group.

`level` Habitat level.

`code` Habitat code.

`name` Habitat name.

`description` Habitat description.

Details

EUNIS 2012:

The full list of EUNIS habitats 2012: codes, scientific names and revised descriptions. The habitat descriptions of the EUNIS classification 2007 were revised in 2012. The 2007 habitat types were not changed in the 2012 description revision which mostly replaced Palaearctic or UK Marine habitat classification codes used in habitat descriptions at levels 5 and below with their EUNIS classification equivalents. In 2019 the classification was further amended to include two new habitats of the revised Resolution 4 of Bern Convention as adopted at the 38th Standing Committee meeting, November 2018. The two habitats are G3.4G *Pinus sylvestris* forest on chalk in the steppe zone and X36 Depressions (pody) of the Steppe zone.

EUNIS Marine 2019:

A revision of EUNIS marine habitat classification was published in 2019. From June 2021 the classification was complemented with crosswalks to Habitats Directive Annex I and to European Red List of Habitats. An updated version was published in March 2022. Users should change to the 2022 version at their earliest convenience.

EUNIS Marine 2022:

The review of the marine component of the EUNIS habitat classification was initiated in 2014. Marine benthic habitats, marine pelagic and marine ice associated habitats are separated into three distinct groups, each with a separate classification structure. The first major division in the benthic marine part of the EUNIS classification is based on major biological zones (related to depth) and substrate type. Level 3 of the classification reflects the main biogeographical regions of Europe's seas based on their distinct combinations of salinity and temperature regimes (Arctic, Baltic, Atlantic, Mediterranean and Black Sea). A first review was published in 2019 and an update to this version concerning mostly the Atlantic regional sea is available since March 2022. Crosswalks to Habitats Directive Annex I and to European Red List of Habitats are available while crosswalks to EUNIS marine habitats of version 2012 for the regional seas apart from the Atlantic need to be revisited.

EUNIS Terrestrial 2021:

The review of the terrestrial component of the EUNIS habitat classification was initiated in 2015. The review concerns the groups of coastal habitats, grasslands, heathland, forest, sparsely vegetated and vegetated man-made habitats. The review was updated in January 2023 with some corrections to the existing groups and with the inclusion of wetlands and additional crosslinks. The remaining groups will be revised and published at a later stage. The classification includes cross-walks at level 3 to Habitats Directive Annex I, to European Red List of Habitats, to Bern Convention Resolution 4 habitats, to MAES and IUCN ecosystems, to Corine Land Cover classes and to the Euroveg Checklist 2016 Syntaxa. The groups of forest and heathland include also crosswalks to an earlier revision of these groups published in 2017. Habitats at level 3 are complemented with lists of characteristic species identified from the EVA database.

Source

<https://www.eea.europa.eu/data-and-maps/data/eunis-habitat-classification-1>

Examples

```
# EUNIS 2012
subset(eunis_habitats, classification == "EUNIS_2012")

# EUNIS Marine 2019
subset(eunis_habitats, classification == "EUNIS_M_2019")

# EUNIS Marine 2022
subset(eunis_habitats, classification == "EUNIS_M_2022")

# EUNIS Terrestrial 2021
subset(eunis_habitats, classification == "EUNIS_T_2021")
```

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