

Package ‘worrms’

July 8, 2020

Type Package

Title World Register of Marine Species (WoRMS) Client

Description Client for World Register of Marine Species (<<http://www.marinespecies.org/>>). Includes functions for each of the API methods, including searching for names by name, date and common names, searching using external identifiers, fetching synonyms, as well as fetching taxonomic children and taxonomic classification.

Version 0.4.2

License MIT + file LICENSE

URL <https://docs.ropensci.org/worrms>,
<https://github.com/ropensci/worrms> (devel), <https://taxize.dev>
(user manual)

BugReports <https://github.com/ropensci/worrms/issues>

LazyData true

VignetteBuilder knitr

Encoding UTF-8

Language en-US

Imports crul (>= 0.6.0), tibble (>= 1.2), jsonlite (>= 1.1),
data.table

Suggests roxygen2 (>= 7.1.0), knitr, rmarkdown, testthat, vcr (>= 0.2.0)

RoxygenNote 7.1.0

X-schema.org-applicationCategory Biology

X-schema.org-keywords biology, science, marine, API, web, api-client,
worms, species

X-schema.org-isPartOf <https://ropensci.org>

NeedsCompilation no

Author Scott Chamberlain [aut, cre] (<<https://orcid.org/0000-0003-1444-9135>>)

Maintainer Scott Chamberlain <myrmecocystus@gmail.com>

Repository CRAN

Date/Publication 2020-07-08 06:20:03 UTC

R topics documented:

worrms-package	2
wm_attr_aphia	3
wm_attr_category	4
wm_attr_data	5
wm_attr_def	6
wm_children	7
wm_classification	8
wm_common_id	9
wm_distribution	10
wm_external	11
wm_id2name	12
wm_name2id	13
wm_ranks	14
wm_record	15
wm_records_common	16
wm_records_date	17
wm_records_name	18
wm_records_names	19
wm_records_rank	20
wm_records_taxamatch	21
wm_record_by_external	21
wm_sources	22
wm_synonyms	23
Index	25

worrms-package	<i>worrms</i>
----------------	---------------

Description

World Register of Marine Species Client

Fail behavior

The WoRMS REST API doesn't have sophisticated error messaging, so most errors will result in a (204) - No Content or in (400) - Bad Request

Because WoRMS doesn't do comprehensive error reporting, we do a fair amount of checking user inputs to help prevent errors that will be meaningless to the user. Let us know if we can improve on this.

Author(s)

Scott Chamberlain <myrmecocystus@gmail.com>

wm_attr_aphia	<i>Get AphiaIDs by attribute definition ID</i>
---------------	--

Description

Get AphiaIDs by attribute definition ID

Usage

```
wm_attr_aphia(id, offset = 1, ...)
```

```
wm_attr_aphia_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) a attribute ID. For <code>wm_attr_aphia</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_attr_aphia_</code> it's optional and can be <code>length(id) >= 1</code>
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_attr_aphia(id = 7)
wm_attr_aphia(id = 4)
wm_attr_aphia(id = 4, offset = 50)

wm_attr_aphia_(id = c(7, 2))

## End(Not run)
```

wm_attr_category	<i>Get attributes grouped by a CategoryID</i>
------------------	---

Description

Get attributes grouped by a CategoryID

Usage

```
wm_attr_category(id, ...)

wm_attr_category_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) a CategoryID. For <code>wm_attr_category</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_attr_category_</code> it's optional and can be <code>length(id) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_attr_category(id = 7)
wm_attr_category(id = 2)

wm_attr_category_(id = c(7, 2))

## End(Not run)
```

wm_attr_data	<i>Get attribute data by AphiaID</i>
--------------	--------------------------------------

Description

Get attribute data by AphiaID

Usage

```
wm_attr_data(id, include_inherited = FALSE, ...)

wm_attr_data_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_attr_data</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_attr_data_</code> it's optional and can be <code>length(id) >= 1</code>
include_inherited	(logical) Include attributes inherited from its parent taxon. Default: FALSE
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_attr_data(id = 127160)
wm_attr_data(id = 126436)

wm_attr_data_(id = c(127160, 126436))

## End(Not run)
```

wm_attr_def	<i>Get attribute definition by ID</i>
-------------	---------------------------------------

Description

Get attribute definition by ID

Usage

```
wm_attr_def(id, include_inherited = FALSE, ...)

wm_attr_def_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an attribute ID. For <code>wm_attr_def</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_attr_def_</code> it's optional and can be <code>length(id) >= 1</code>
include_inherited	(logical) Include attributes inherited from its parent taxon. Default: FALSE
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_attr_def(id = 1)
wm_attr_def(id = 4)
wm_attr_def(id = 4, include_inherited = TRUE)

wm_attr_def_(id = c(4, 1))

## End(Not run)
```

wm_children

Get children for an AphiaID

Description

Get children for an AphiaID

Usage

```
wm_children(id, marine_only = TRUE, offset = 1, ...)
```

```
wm_children_(id = NULL, name = NULL, marine_only = TRUE, offset = 1, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_children</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_children_</code> it's optional and can be <code>length(id) >= 1</code>
marine_only	(logical) marine only or not. default: TRUE
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_children(343613)
wm_children(id = 105706)
wm_children(id = 105706, FALSE)
wm_children(id = 105706, offset = 5)

# plural version, via id or name
wm_children_(id = c(105706, 343613))
wm_children_(name = c('Mesodesma', 'Leucophaeus'))

## End(Not run)
```

wm_classification	<i>Get classification for an AphiaID</i>
-------------------	--

Description

Get classification for an AphiaID

Usage

```
wm_classification(id, ...)

wm_classification_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_children</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_children_</code> it's optional and can be <code>length(id) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_classification(id = 105706)
wm_classification(id = 126436)

wm_classification(254967)
wm_classification(344089)

# plural version, via id or name
wm_classification_(id = c(254967, 344089))
wm_classification_(name = c('Platanista gangetica', 'Leucophaeus scoresbii'))

## End(Not run)
```

wm_common_id	<i>Get vernacular names from an AphiaID</i>
--------------	---

Description

Get vernacular names from an AphiaID

Usage

```
wm_common_id(id, ...)

wm_common_id_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_common_id</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_common_id_</code> it's optional and can be <code>length(id) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_common_id(id = 105706)
wm_common_id(id = 156806)
wm_common_id(id = 397065)

wm_common_id(id = c(105706, 156806, 397065))
nms <- c("Rhincodontidae", "Mesodesma deauratum", "Cryptomya californica")
wm_common_id(name = nms)

## End(Not run)
```

wm_distribution	<i>Get distribution data by AphiaID</i>
-----------------	---

Description

Get distribution data by AphiaID

Usage

```
wm_distribution(id, ...)

wm_distribution_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_distribution</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_distribution_</code> it's optional and can be <code>length(id) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_distribution(id = 156806)
wm_distribution(id = 126436)

wm_distribution_(id = c(156806, 126436))

## End(Not run)
```

wm_external	<i>Get an external ID via an AphiaID</i>
-------------	--

Description

Get an external ID via an AphiaID

Usage

```
wm_external(id, type = "tsn", ...)

wm_external_(id = NULL, name = NULL, type = "tsn", ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_external</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_external_</code> it's optional and can be <code>length(id) >= 1</code>
type	(character) the type of external id. one of: <code>tsn</code> , <code>bold</code> , <code>dyntaxa</code> , <code>eol</code> , <code>fishbase</code> , <code>iucn</code> , <code>lsid</code> , <code>ncbi</code> , <code>gisd</code> . default: <code>tsn</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

An integer that is the ID. When using underscore method, a list, named by the input IDs

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
# by default, get a TSN (an ITIS code)
wm_external(id = 1080)

## get many
wm_external_(id = c(1080, 126436))

# BOLD code
wm_external(id = 278468, type = "bold")

# NCBI code
wm_external(id = 278468, type = "ncbi")

# fishbase code
wm_external(id = 278468, type = "fishbase")

# curl options
library(crul)
wm_external(id = 105706, verbose = TRUE)

## End(Not run)
```

wm_id2name

Get taxonomic name for an AphiaID

Description

Get taxonomic name for an AphiaID

Usage

```
wm_id2name(id, ...)
```

```
wm_id2name_(id, ...)
```

Arguments

id (numeric/integer) an AphiaID, required. For `wm_id2name` must be `length(id) == 1`, but for `wm_id2name_` can be `length(id) >= 1`

... named curl options. see `curl::curl_options`

Value

An character string that is the taxonomic name. When using underscore method, a list, named by the input IDs

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_id2name(id = 105706)
wm_id2name_(id = c(105706, 126436))

## End(Not run)
```

wm_name2id	<i>Get AphiaID from a taxonomic name</i>
------------	--

Description

Get AphiaID from a taxonomic name

Usage

```
wm_name2id(name, ...)
wm_name2id_(name, ...)
```

Arguments

name	(character) a taxonomic name, required. For <code>wm_name2id</code> must be <code>length(name) == 1</code> , but for <code>wm_name2id_</code> can be <code>length(name) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>

Value

An integer that is the AphiaID. When using underscore method, a list, named by the input names

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_name2id(name = "Rhincodon")
wm_name2id_(name = c("Rhincodon", "Gadus morhua"))

## End(Not run)
```

wm_ranks

Get taxonomic ranks by their identifier

Description

Get taxonomic ranks by their identifier

Usage

```
wm_ranks_id(rank_id, id = NULL, offset = 1, ...)
wm_ranks_name(rank_name, id = NULL, offset = 1, ...)
```

Arguments

rank_id (numeric/integer) a rank identifier. length==1
id an AphiaID. length==1
offset (integer) record to start at. default: 1
... named curl options. see `curl::curl_options`
rank_name (character) a rank name. length==1

Value

A tibble/data.frame

Examples

```
## Not run:
wm_ranks_id(220)
wm_ranks_id(180)
wm_ranks_id(180, id = 4)

wm_ranks_name("genus")
wm_ranks_name("genus", id = 4)

## End(Not run)
```

 wm_record

Get complete AphiaRecord for an AphiaID

Description

Get complete AphiaRecord for an AphiaID

Usage

```
wm_record(id, ...)
```

```
wm_record_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_record</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_record_</code> it's optional and can be <code>length(id) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A named list. When using underscore method, each output is named by the input ID, and can be separated by the list names

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Note

`wm_record_` is defunct, `wm_record` can do plural requests now

Examples

```
## Not run:
wm_record(id = 105706)
wm_record(id = c(105706, 126436))
wm_record_(id = c(105706, 126436))

## End(Not run)
```

wm_records_common *Get records by vernacular name, optional fuzzy matching*

Description

Get records by vernacular name, optional fuzzy matching

Usage

```
wm_records_common(name, fuzzy = FALSE, offset = 1, ...)
```

```
wm_records_common_(name, fuzzy = FALSE, offset = 1, ...)
```

Arguments

name	(character) a species common name. required. For <code>wm_records_common</code> must be <code>length(name) == 1</code> ; for <code>wm_records_common_</code> can be <code>length(name) >= 1</code>
fuzzy	(logical) fuzzy search. default: FALSE
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_records_common(name = 'dolphin')
wm_records_common(name = 'clam')

wm_records_common_(name = c('dolphin', 'clam'))

wm_records_common(name = 'dolphin', fuzzy = TRUE)
wm_records_common(name = 'clam', fuzzy = TRUE, offset = 5)

## End(Not run)
```

wm_records_date	<i>Get records by date</i>
-----------------	----------------------------

Description

Get records by date

Usage

```
wm_records_date(  
  start_date,  
  end_date = NULL,  
  marine_only = TRUE,  
  offset = 1,  
  ...  
)
```

Arguments

start_date	(character) start date. required.
end_date	(character) end date. optional
marine_only	(logical) marine only or not. default: TRUE
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>

Value

A tibble/data.frame

Examples

```
## Not run:  
a_date <- format(Sys.Date() - 1, "%Y-%m-%dT%H:%M:%S+00:00")  
wm_records_date(a_date)  
  
## End(Not run)
```

wm_records_name	<i>Get records by single name, optional fuzzy matching</i>
-----------------	--

Description

Get records by single name, optional fuzzy matching

Usage

```
wm_records_name(name, fuzzy = TRUE, marine_only = TRUE, offset = 1, ...)
```

Arguments

name	(character) a taxonomic name, required.
fuzzy	(logical) fuzzy search. default: TRUE
marine_only	(logical) marine only or not. default: TRUE
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>

Value

A tibble/data.frame

Note

there is no underscore method like other functions in this package as there is already a plural version:
[wm_records_names\(\)](#)

Examples

```
## Not run:  
wm_records_name(name = 'Leucophaeus')  
wm_records_name(name = 'Leucophaeus', fuzzy = FALSE)  
wm_records_name(name = 'Leucophaeus', marine_only = FALSE)  
wm_records_name(name = 'Platanista', marine_only = FALSE)  
wm_records_name(name = 'Platanista', marine_only = FALSE, offset = 5)  
  
## End(Not run)
```

wm_records_names	<i>Get records for onen or more taxonomic name(s)</i>
------------------	---

Description

Get records for onen or more taxonomic name(s)

Usage

```
wm_records_names(name, fuzzy = FALSE, marine_only = TRUE, ...)
```

Arguments

name	(character) start date. required.
fuzzy	(logical) fuzzy search. default: FALSE
marine_only	(logical) marine only or not. default: TRUE
...	named curl options. see <code>curl::curl_options</code>

Value

A list of tibble's/data.frame's, one for each of the input names

Note

there is no underscore method like other functions in this package as this is the plural version for [wm_records_name\(\)](#)

Examples

```
## Not run:  
wm_records_names(name = 'Leucophaeus scoresbii')  
wm_records_names(name = 'Leucophaeus scoresbii', fuzzy = TRUE)  
wm_records_names(name = c('Leucophaeus scoresbii', 'Coryphaena'))  
  
## End(Not run)
```

wm_records_rank *Get AphiaRecords for a given taxonRankID*

Description

Get AphiaRecords for a given taxonRankID

Usage

```
wm_records_rank(rank_id, id = NULL, offset = 1, ...)
```

Arguments

rank_id	(numeric/integer) a rank id
id	(character) a single AphiaID
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:  
wm_records_rank(rank_id = 180, id = 106776)  
wm_records_rank(rank_id = 180, id = 106776, offset = 50)  
  
## End(Not run)
```

wm_records_taxamatch *Get records for onen or more taxonomic name(s) using the TAXAMATCH fuzzy matching algorithm*

Description

Get records for onen or more taxonomic name(s) using the TAXAMATCH fuzzy matching algorithm

Usage

```
wm_records_taxamatch(name, marine_only = TRUE, ...)
```

Arguments

name (character) taxon name. required.
marine_only (logical) marine only or not. default: TRUE
... named curl options. see `curl::curl_options`

Value

A list of tibble's/data.frame's, one for each of the input names

Note

there is no underscore method like other functions in this package as this function already accepts many names

Examples

```
## Not run:  
wm_records_taxamatch(name = 'Leucophaeus')  
wm_records_taxamatch(name = c('Leucophaeus', 'Coryphaena'))  
  
## End(Not run)
```

wm_record_by_external *Get record by external ID*

Description

Get record by external ID

Usage

```
wm_record_by_external(id, type = "tsn", ...)
```

```
wm_record_by_external_(id = NULL, name = NULL, type = "tsn", ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_record_by_external</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_record_by_external_</code> it's optional and can be <code>length(id) >= 1</code>
type	(character) the type of external id. one of: <code>tsn</code> , <code>bold</code> , <code>dyntaxa</code> , <code>eol</code> , <code>fishbase</code> , <code>iucn</code> , <code>lsid</code> , <code>ncbi</code> , <code>gisd</code> . default: <code>tsn</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A named list. When using underscore method, each output is named by the input ID, and can be separated by the list names

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_record_by_external(id = 85257)
wm_record_by_external(id = 159854)

wm_record_by_external_(id = c(85257, 159854))

## End(Not run)
```

 wm_sources

Get sources for an AphiaID

Description

Get sources for an AphiaID

Usage

```
wm_sources(id, ...)
```

```
wm_sources_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_sources</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_sources_</code> it's optional and can be <code>length(id) >= 1</code>
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_sources(id = 105706)
wm_sources_(id = 105706)
wm_sources_(id = c(105706, 126436))
wm_sources_(name = c("Rhincodontidae", "Gadus morhua"))

## End(Not run)
```

 wm_synonyms

Get synonyms for an AphiaID

Description

Get synonyms for an AphiaID

Usage

```
wm_synonyms(id, offset = 1, ...)
```

```
wm_synonyms_(id = NULL, name = NULL, ...)
```

Arguments

id	(numeric/integer) an AphiaID. For <code>wm_synonyms</code> it's required and must be <code>length(id) == 1</code> , for <code>wm_synonyms_</code> it's optional and can be <code>length(id) >= 1</code>
offset	(integer) record to start at. default: 1
...	named curl options. see <code>curl::curl_options</code>
name	(character) one or more taxonomic names. optional

Value

A tibble/data.frame. when using underscore method, outputs from each input are binded together, but can be split by id column

Singular vs. plural

Of the two sister functions, the one without the underscore is the original function that wraps the relevant WoRMS API method - and only accepts one thing (i.e., name or AphiaID) per request.

The sister function with the underscore at the end is the plural version, accepting more than one input. Internally this function loops over the non-underscore method, and labels output (whether it's a list or data.frame rows) with the input names or IDs so that you can easily parse output by your inputs.

Examples

```
## Not run:
wm_synonyms(id = 105706)
wm_synonyms_(id = 105706)
wm_synonyms(id = 126436)
wm_synonyms(id = 126436, offset = 10)
wm_synonyms_(id = c(105706, 126436))

## End(Not run)
```


Index

* package

- worrms-package, 2

- wm_attr_aphia, 3
- wm_attr_aphia_(wm_attr_aphia), 3
- wm_attr_category, 4
- wm_attr_category_(wm_attr_category), 4
- wm_attr_data, 5
- wm_attr_data_(wm_attr_data), 5
- wm_attr_def, 6
- wm_attr_def_(wm_attr_def), 6
- wm_children, 7
- wm_children_(wm_children), 7
- wm_classification, 8
- wm_classification_(wm_classification), 8

- wm_common_id, 9
- wm_common_id_(wm_common_id), 9
- wm_distribution, 10
- wm_distribution_(wm_distribution), 10
- wm_external, 11
- wm_external_(wm_external), 11
- wm_id2name, 12
- wm_id2name_(wm_id2name), 12
- wm_name2id, 13
- wm_name2id_(wm_name2id), 13
- wm_ranks, 14
- wm_ranks_id(wm_ranks), 14
- wm_ranks_name(wm_ranks), 14
- wm_record, 15
- wm_record_(wm_record), 15
- wm_record_by_external, 21
- wm_record_by_external_(wm_record_by_external), 21
- wm_records_common, 16
- wm_records_common_(wm_records_common), 16

- wm_records_date, 17
- wm_records_name, 18
- wm_records_name(), 19

- wm_records_names, 19
- wm_records_names(), 18
- wm_records_rank, 20
- wm_records_taxamatch, 21
- wm_sources, 22
- wm_sources_(wm_sources), 22
- wm_synonyms, 23
- wm_synonyms_(wm_synonyms), 23
- worrms (worrms-package), 2
- worrms-package, 2