Package ‘rfishbase’

August 9, 2021

Title  R Interface to ‘FishBase’

Description A programmatic interface to ‘FishBase’, re-written based on an accompanying 'RESTful' API. Access tables describing over 30,000 species of fish, their biology, ecology, morphology, and more. This package also supports experimental access to 'SeaLifeBase' data, which contains nearly 200,000 species records for all types of aquatic life not covered by 'FishBase.'

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BugReports https://github.com/ropensci/rfishbase/issues

LazyData true

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A programmatic interface to FishBase, re-written based on an accompanying 'RESTful' API. Access tables describing over 30,000 species of fish, their biology, ecology, morphology, and more. This package also supports experimental access to SeaLifeBase data, which contains nearly 200,000 species records for all types of aquatic life not covered by FishBase.'

Author(s)

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Usage

available_releases()

Details

Lists all available releases (year.month format). To use a specific release, set the desired release using 'options(FISHBASE_VERSION=)', as shown in the examples. Otherwise, rfishbase will use the latest available version if this option is unset. NOTE: it will be necessary to clear the cache with 'clear_cache()' or by restarting the R session with a fresh environment.

Examples

available_releases()
options(FISHBASE_VERSION="19.04")
## unset
options(FISHBASE_VERSION=NULL)
brains

**Description**

brains

**Usage**

```r
bones(
    species_list = NULL,
    fields = NULL,
    server =getOption("FISHBASE_API", "fishbase"),
    version = get_latest_release(),
    db = default_db(),
    ...
)
```

**Arguments**

- `species_list` A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields` a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
- `server` can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.
- `version` a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db` the
- `...` unused; for backwards compatibility only

**Value**

a table of species brains

**Examples**

```r
## Not run:
brains("Oreochromis niloticus")
## End(Not run)
```
Description

Return a table of common names

Usage

common_names(
  species_list = NULL,
  server =getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  Language = "English",
  fields = NULL
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

Language a string specifying the language for the common name, e.g. "English"

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

Details

Note that there are many common names for a given sci name, so sci_to_common doesn’t make sense

Value

a data.frame of common names by species queried. If multiple species are queried, The resulting data.frames are concatenated.
Description

Return a list of scientific names corresponding to given the common name(s).

Usage

```r
common_to_sci(
  x,
  Language = "English",
  server =getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db()
)
```

Arguments

- `x`: a common name or list of common names
- `Language`: a string specifying the language for the common name, e.g. "English"
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the

Details

If more than one scientific name matches the common name (e.g. "trout"), the function will simply return a list of all matching scientific names. If given more than one common name, the resulting strings of matching scientific names are simply concatenated.

Value

a character vector of scientific names

See Also

`species_list`, `synonyms`

Examples

```r
common_to_sci(c("Bicolor cleaner wrasse", "humphead parrotfish"), Language="English")
common_to_sci(c("Coho Salmon", "trout"))
```
Description

return a table of country for the requested species, as reported in FishBASE.org

Usage

country(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default.db(),
  ...
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
version a version string for the database, will default to the latest release. see [get_releases()] for details.
db the
... unused; for backwards compatibility only

Details

e.g. http://www.fishbase.us/Country

Examples

## Not run:
country(species_list(Genus='Labroides'))

## End(Not run)
### countrysub

#### Description

return a table of countrysub for the requested species

#### Usage

```r
countrysub(
    species_list = NULL,
    fields = NULL,
    server =getOption("FISHBASE_API", "fishbase"),
    version = get_latest_release(),
    db = default_db(),
    ...
)
```

#### Arguments

- **species_list**: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- **fields**: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
- **server**: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- **version**: a version string for the database, will default to the latest release. see `get_releases()` for details.
- **db**: the
- **...**: unused; for backwards compatibility only

#### Examples

```r
## Not run:
countrysub(species_list(Genus='Labroides'))
```

```r
## End(Not run)
```
Description

return a table of countrysubref

Usage

countrysubref(
    server = getOption("FISHBASE_API", "fishbase"),
    version = get_latest_release(),
    db = default_db(),
    ...
)

Arguments

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. `Sys.setenv(FISHBASE_API= "sealifebase")`.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

... unused; for backwards compatibility only

Examples

## Not run:
countrysubref()

## End(Not run)

c_code

Description

return a table of country information for the requested c_code, as reported in FishBASE.org
Usage

c_code(
  c_code = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)

Arguments

c_code a C_Code or list of C_Codes (FishBase country code)
server can be set to either "fishbase" or "sealifebase" to switch between databases.
NOTE: it is usually easier to leave this as NULL and set the source instead using
the environmental variable 'FISHBASE_API', e.g. 'Sys.setenv(FISHBASE_API="sealifebase")'.
version a version string for the database, will default to the latest release. see [get_releases()]
for details.
db the
...
... unused; for backwards compatibility only

Details
e.g. http://www.fishbase.us/Country

Examples

## Not run:
c_code(440)
## End(Not run)

---

default_db Connect to the rfishbase database

Description

Connect to the rfishbase database

Usage

default_db(dbdir = db_dir(), driver = Sys.getenv("DB_DRIVER", "RSQLite"))
Arguments

- **dbdir**: Path to the database.
- **driver**: Default driver, one of "duckdb", "MonetDBLite", "RSQLite". `rfishbase` will select the first one of those it finds available if a driver is not set. This fallback can be overwritten either by explicit argument or by setting the environmental variable `rfishbase_DRIVER`.

Details

This function provides a default database connection for `rfishbase`. Note that you can use `rfishbase` with any DBI-compatible database connection by passing the connection object directly to `rfishbase` functions using the `db` argument. `default_db()` exists only to provide reasonable automatic defaults based on what is available on your system.

`duckdb` or `MonetDBLite` will give the best performance, and regular users `rfishbase` will work with the built-in `RSQLite`, and with other database connections such as Postgres or MariaDB, but queries (filtering joins) will be much slower on these non-columnar databases.

For performance reasons, this function will also cache and restore the existing database connection, making repeated calls to `default_db()` much faster and more failsafe than repeated calls to `DBI::dbConnect`

Value

Returns a `src_dbi` connection to the default duckdb database

Examples

```r
## OPTIONAL: you can first set an alternative home location,
## such as a temporary directory:
Sys.setenv(FISHBASE_HOME=tempdir())

## Connect to the database:
db <- default_db()
```

---

**diet**  

**Description**

- **diet**
Usage

```r
diet(
    species_list = NULL,
    fields = NULL,
    server = getOption("FISHBASE_API", "fishbase"),
    version = get_latest_release(),
    db = default_db(),
    ...
)
```

Arguments

- **species_list**: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- **fields**: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
- **server**: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable `FISHBASE_API`, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.
- **version**: a version string for the database, will default to the latest release. see [get_releases()](http://www.fishbase.org/manual/english/fishbase.html) for details.
- **db**: the
- **...**: unused; for backwards compatibility only

Value

- A table of species diet

References


Examples

```r
## Not run:
diet("Oreochromis niloticus")
```

## End(Not run)
diet_items

Description

fooditems

Usage

diet_items(
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)

Arguments

server can be set to either "fishbase" or "sealifefbase" to switch between databases.
NOTE: it is usually easier to leave this as NULL and set the source instead using
the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifefbase")’.

version a version string for the database, will default to the latest release. see [get_releases()]
for details.

db the

... unused; for backwards compatibility only

Value

a table of species diet_items

Examples

## Not run:
diet_items("Oreochromis niloticus")

## End(Not run)
distribution

Description

return a table of species locations as reported in FishBASE.org FAO location data

Usage

distribution(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)

Arguments

species_list  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields  a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server  can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version  a version string for the database, will default to the latest release. see [get_releases()] for details.

db  the

...  unused; for backwards compatibility only

Details

currently this is ~ FAO areas table (minus "note" field) e.g. http://www.fishbase.us/Country/FaoAreaList.php?ID=5537

Examples

## Not run:
distribution(species_list(Genus='Labroides'))

## End(Not run)
Description

documentation of tables and fields

Usage

docs(table = NULL, server = NULL, ...)

Arguments

table the table for which the documentation should be displayed. If no table is given, documentation summarizing all available tables is shown.

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable 'FISHBASE_API', e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

... unused; for backwards compatibility only

Value

A data.frame which lists the name of each table (if no table argument is given), along with a description of the table and a URL linking to further information about the table. If a specific table is named in the table argument, then the function will return a data.frame listing all the fields (columns) found in that table, a description of what the field label means, and the units in which the field is measured. These descriptions of the columns are not made available by FishBase and must be manually generated and curated by FishBase users. At this time, many fields are still missing. Please take a moment to fill in any fields you use in the source table here: https://github.com/ropensci/fishbaseapi/tree/master/docs/docs-sources

Examples

tables <- docs()
# Describe the fecundity table
dplyr::filter(tables, table == "fecundity")$description
## See fields in fecundity table
docs("fecundity")
## Note: only
ecology

Description

ecology

Usage

```r
ecology(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

Arguments

- **species_list**: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- **fields**: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
- **server**: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable 'FISHBASE_API', e.g. `Sys.setenv(FISHBASE_API="sealifebase")'.
- **version**: a version string for the database, will default to the latest release. see `get_releases()` for details.
- **db**: the
- **...**: unused; for backwards compatibility only

Details

By default, will only return one entry (row) per species. Increase limit to get multiple returns for different stocks of the same species, though often data is either identical to the first or simply missing in the additional stocks.

Value

a table of species ecology data

References

### Examples

```r
## Not run:
ecology("Oreochromis niloticus")
```

```r
## trophic levels and standard errors for a list of species
ecology(c("Oreochromis niloticus", "Salmo trutta"),
        fields=c("SpecCode", "FoodTroph", "FoodSeTroph", "DietTroph", "DietSeTroph"))
```

## End(Not run)

### Description

`ecosystem`

### Usage

```r
ecosystem(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

### Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields`: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the
- `...`: unused; for backwards compatibility only

### Value

A table of species ecosystems data
Examples

## Not run:
ecosystem("Oreochromis niloticus")

## End(Not run)

estimate estimate

Description

estimate

Usage

estimate(
  species_list = NULL, 
  fields = NULL, 
  server = getOption("FISHBASE_API", "fishbase"), 
  version = get_latest_release(), 
  db = default_db(), 
  ...
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
version a version string for the database, will default to the latest release. see [get_releases()] for details.

db
...
unused; for backwards compatibility only

Value

a table of estimates from some models on trophic levels

References

http://www.fishbase.us/manual/English/FishbaseThe_FOOD_ITEMS_table.htm
Examples

```r
## Not run:
estimate("Oreochromis niloticus")
## End(Not run)
```

Description

return a table of species locations as reported in FishBASE.org FAO location data

Usage

```r
faoareas(
species_list = NULL,
fields = NULL,
server = getOption("FISHBASE_API", "fishbase"),
version = get_recent_release(),
db = default_db(),
...)
```

Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields`: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the
- `...`: unused; for backwards compatibility only

Details

currently this is ~ FAO areas table (minus "note" field) e.g. http://www.fishbase.us/Country/FaoAreaList.php?ID=5537

Value

a tibble, empty tibble if no results found
Examples

```r
## Not run:
faoareas()

## End(Not run)
```

Description

`fecundity`

Usage

```r
fecundity(
  species_list = NULL,
  fields = NULL,
  server =getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

Arguments

- `species_list` A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields` a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
- `server` can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version` a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db` the
- `...` unused; for backwards compatibility only

Value

A table of species fecundity
Examples

```r
## Not run:
fecundity("Oreochromis niloticus")

## End(Not run)
```

---

**fishbase**

A table of all the species found in FishBase, including taxonomic classification and the Species Code (SpecCode) by which the species is identified in FishBase.

---

**Description**

A table of all the species found in FishBase, including taxonomic classification and the Species Code (SpecCode) by which the species is identified in FishBase.

**Author(s)**

Carl Boettiger<br>carl@ropensci.org

---

**fooditems**

**Description**

**Usage**

```r
fooditems(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```
Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

... unused; for backwards compatibility only

Value

a table of species fooditems

References


Examples

## Not run:
fooditems("Oreochromis niloticus")

## End(Not run)

---

description

Usage

genetics(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
...
)


introductions

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the ...

Value

a table of species genetics data

Examples

## Not run:
genetics("Oreochromis niloticus")
genetics("Labroides dimidiatus")

## End(Not run)

introductions

introductions

Description

introductions

Usage

introductions(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),

...)

)
Arguments

- **species_list**: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- **fields**: A character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
- **server**: Can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- **version**: A version string for the database, will default to the latest release. See [get_releases()] for details.
- **db**: The
- ... unused; for backwards compatibility only

Value

A table of species introductions data

Examples

```r
## Not run:
introductions("Oreochromis niloticus")

## End(Not run)
```

larvae

```r
larvae
```

Description

larvae

Usage

```r
larvae(
  species_list = NULL,
  fields = NULL,
  server =getOption("FISHBASE_API","fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```
Arguments

species_list  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields  a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server  can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version  a version string for the database, will default to the latest release. see [get_releases()] for details.

db  the ... unused; for backwards compatibility only

Value

a table of larval data

Examples

```r
## Not run:
larvae("Oreochromis niloticus")

## End(Not run)
```

Description

return a table of species fooditems

Usage

```r
length_freq(
  species_list = NULL,
  fields = NULL,
  server =getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```
Arguments

**species_list**  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

**fields**  a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

**server**  can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

**version**  a version string for the database, will default to the latest release. see [get_releases()] for details.

**db**  the

...  unused; for backwards compatibility only

Value

a table of length_freq information by species; see details

References

http://www.fishbase.org/manual/english/lengthfrequency.htm

Examples

```r
## Not run:
length_freq("Oreochromis niloticus")
## End(Not run)
```

---

**Description**

return a table of lengths

**Usage**

```r
length_length(
  species_list = NULL,
  fields = NULL,
  server =getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...)
```
Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

... unused; for backwards compatibility only

Details

This table contains relationships for the conversion of one length type to another for over 8,000 species of fish, derived from different publications, e.g. Moutopoulos and Stergiou (2002) and Gaygusuz et al (2006), or from fish pictures, e.g. Collette and Nauen (1983), Compagno (1984) and Randall (1997). The relationships, which always refer to centimeters, may consist either of a regression linking two length types, of the form: Length type (2) = a + b x Length type (1) Length type (2) = b’ x Length type (1) The available length types are, as elsewhere in FishBase, TL = total length; FL = fork length; SL = standard length; WD = width (in rays); OT = other type (to be specified in the Comment field). When a version of equation (1) is presented, the length range, the number of fish used in the regression, the sex and the correlation coefficient are presented, if available. When a version of equation (2) is presented, the range and the correlation coefficient are omitted, as the ratio in (2) will usually be estimated from a single specimen, or a few fish covering a narrow range of lengths.

Value

a table of lengths

References


Examples

```r
## Not run:
length_length("Oreochromis niloticus")

## End(Not run)
```
The LENGTH-WEIGHT table presents the a and b values of over 5,000 length-weight relationships of the form \(W = a \times L^b\), pertaining to about over 2,000 fish species.

Usage

```r
length_weight(
    species_list = NULL,
    fields = NULL,
    server = getOption("FISHBASE_API", "fishbase"),
    version = get_latest_release(),
    db = default_db(),
    ...
)
```

Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields`: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable FISHBASE_API, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the
- `...`: unused; for backwards compatibility only

Details

See references for official documentation. From FishBase.org: Length-weight relationships are important in fisheries science, notably to raise length-frequency samples to total catch, or to estimate biomass from underwater length observations. The units of length and weight in FishBase are centimeter and gram, respectively. Thus when length-weight relationships are not in cm-g, the intercept 'a' is transformed as follows:

\[ a'(cm, g) = a(mm, g) \times 10^b \]
\[ a'(cm, g) = a(cm, kg) \times 10^b \times 1000 \]
\[ a'(cm, mg) = a(mm, mg) \times 10^b \times 1000 \]
\[ a'(cm, kg) = a(mm, kg) \times 10^b \times 1000 \]

However, published length-weight relationships are sometimes difficult to use, as they may be based on a length measurement type (e.g., fork length) different from ones length measurements (expressed e.g., as total length). Therefore, to facilitate conversion between length types, an additional
LENGTH-LENGTH table, *presented below, was devised which presents linear regressions or ratios linking length types (e.g., FL vs. TL). We included a calculated field with the weight of a 10 cm fish (which should be in the order of 10 g for normal, fusiform shaped fish), to allow identification of gross errors, given knowledge of the body form of a species.

**Value**

a table of length_weight information by species; see details

**References**


**Examples**

```r
## Not run:
length_weight("Oreochromis niloticus")
## End(Not run)
```

---

**list_fields**

<table>
<thead>
<tr>
<th>list_fields</th>
<th>list_fields</th>
</tr>
</thead>
</table>

**Description**

list fields

**Usage**

```r
list_fields(fields = NULL, server = NULL, implemented_only = TRUE)
```

**Arguments**

- `fields`: field (column name) to search for
- `server`: base URL to the FishBase API (by default). For SeaLifeBase, use https://fishbase.ropensci.org/sealifebase
- `implemented_only`: by default, only return those tables that have been implemented.

**Details**

Calling `list_fields()` with no arguments will return the full table of all known fields. Then users can employ standard filter techniques like grep for partial name matching; see examples.

**Value**

a data frame listing the table names (matching function names in rfishbase) and the matching column names those tables have implemented.
Examples

```r
list_fields("Temp")

## Regex matching on full table
library(dplyr)
list_fields() %>% filter(grepl("length", columns, ignore.case = TRUE))
```

Description

load_taxa

Usage

```r
load_taxa(
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  collect = TRUE,
  ...
)
```

Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>server</td>
<td>Either &quot;fishbase&quot; (the default) or &quot;sealifebase&quot;</td>
</tr>
<tr>
<td>version</td>
<td>the version of the database you want. Will default to the latest available; see [available_releases()].</td>
</tr>
<tr>
<td>db</td>
<td>A remote database connection. Will default to the best available system, see [default_db()].</td>
</tr>
<tr>
<td>collect</td>
<td>return a data.frame if TRUE, otherwise, a DBI connection to the table in the database</td>
</tr>
<tr>
<td>...</td>
<td>for compatibility with previous versions</td>
</tr>
</tbody>
</table>

Value

the taxa list
### Description

maturity

### Usage

```r
maturity(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

### Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>species_list</td>
<td>A vector of scientific names (each element as &quot;genus species&quot;). If empty, a table for all fish will be returned.</td>
</tr>
<tr>
<td>fields</td>
<td>a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later</td>
</tr>
<tr>
<td>server</td>
<td>can be set to either &quot;fishbase&quot; or &quot;sealifebase&quot; to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API=&quot;sealifebase&quot;)’.</td>
</tr>
<tr>
<td>version</td>
<td>a version string for the database, will default to the latest release. see [get_releases()] for details.</td>
</tr>
<tr>
<td>db</td>
<td>the</td>
</tr>
<tr>
<td>...</td>
<td>unused; for backwards compatibility only</td>
</tr>
</tbody>
</table>

### Value

a table of species maturity

### Examples

```r
## Not run:
maturity("Oreochromis niloticus")
## End(Not run)
```
morphology

Description

morphology

Usage

morphology(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)

Arguments

species_list  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
fields        a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
server        can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
version       a version string for the database, will default to the latest release. see [get_releases()] for details.

Value

a table of species morphology data

Examples

## Not run:
morphology("Oreochromis niloticus")

## End(Not run)
morphometrics

Description

morphometrics

Usage

morphometrics(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

... unused; for backwards compatibility only

Value

a table of species morphometrics data

Examples

## Not run:
morphometrics("Oreochromis niloticus")

## End(Not run)
Description

occurrence

Usage

occurrence()

Details

THE OCCURRENCE TABLE HAS BEEN DROPPED BY FISHBASE - THIS FUNCTION NOW RETURNS A STOP MESSAGE.

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’. 

Usage

oxygen(

Greenland
### Description

Table of maximum length (Lmax), weight (Wmax) and age (tmax)

### Usage

```r
popchar(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

### Arguments

- **species_list**
  - A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

- **fields**
  - A character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

- **server**
  - Can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable 'FISHBASE_API', e.g. `Sys.setenv(FISHBASE_API="sealifebase")'.

- **version**
  - A version string for the database, will default to the latest release. see [get_releases()] for details.

- **db**
  - The Unused; for backwards compatibility only

- **...**
  - Unused; for backwards compatibility only

### Examples

```r
## Not run:
oxygen("Oreochromis niloticus")

## End(Not run)
```
Details

See references for official documentation. From FishBase.org: This table presents information on maximum length (Lmax), weight (Wmax) and age (tmax) from various localities where a species occurs. The largest values from this table are also entered in the SPECIES table. The POPCHAR table also indicates whether the Lmax, Wmax and tmax values or various combinations thereof refer to the same individual fish.

References


Examples

```r
## Not run:
popchar("Oreochromis niloticus")
## End(Not run)
```

Description

This table contains information on growth, natural mortality and length at first maturity, which serve as inputs to many fish stock assessment models. The data can also be used to generate empirical relationships between growth parameters or natural mortality estimates, and their correlates (e.g., body shape, temperature, etc.), a line of research that is useful both for stock assessment and for increasing understanding of the evolution of life-history strategies.

Usage

```r
popgrowth(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields`: A character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable `FISHBASE_API`, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`. version a version string for the database, will default to the latest release. see [get_releases()](#) for details.

Value

a table of population growth information by species; see details

References


Examples

```r
## Not run:
popgrowth("Oreochromis niloticus")

## End(Not run)
```

Description

popqb

Usage

```r
popqb(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```
Arguments

*species_list*  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

*fields*  a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

*server*  can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable `FISHBASE_API`, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.

*version*  a version string for the database, will default to the latest release. see [get_releases()]

*db*  the

...  unused; for backwards compatibility only

Value

a table of species popqb

References


Examples

```r
## Not run:
popqb("Oreochromis niloticus")

## End(Not run)
```

```
predators           predators
```

Description

predators

Usage

```r
predators(
  species_list = NULL,
  fields = NULL,
  server =getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```
ration

Arguments

species_list  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields  a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server  can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version  a version string for the database, will default to the latest release. see [get_releases()] for details.

db  the

...  unused; for backwards compatibility only

Value

a table of predators

References


Examples

## Not run:
predators("Oreochromis niloticus")

## End(Not run)

ration  ration

Description

ration

Usage

ration(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
version a version string for the database, will default to the latest release. see [get_releases()] for details.
db the
... unused; for backwards compatibility only

Value

a table of species ration

References


Examples

## Not run:
ration("Oreochromis niloticus")

## End(Not run)

references references

description references

Usage

references(
codes = NULL,
fields = NULL,
server = getOption("FISHBASE_API", "fishbase"),
version = get_latest_release(),
db = default_db(),
... )


Arguments

- **codes**: One or more Fishbase reference numbers, matching the RefNo field.
- **fields**: A character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
- **server**: Can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.
- **version**: A version string for the database, will default to the latest release. See `get_releases()` for details.
- **db**: The
- **...**: Unused; for backwards compatibility only

Value

A tibble (data.frame) of reference data

Examples

```r
## Not run:
references(codes = 1)
references(codes = 1:6)
references(codes = 1:6, fields = c('Author', 'Year', 'Title'))
references() # all references

## End(Not run)
```

Description

Reproduction

Usage

```r
reproduction(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```
sealifebase

Arguments

species_list  A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields  a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server  can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.

version  a version string for the database, will default to the latest release. see [get_releases()] for details.

db  the

...  unused; for backwards compatibility only

Value

a table of species reproduction

Examples

```r
## Not run:
reproduction("Oreochromis niloticus")

## End(Not run)
```

sealifebase  A table of all the species found in SeaLifeBase, including taxonomic classification and the Species Code (SpecCode) by which the species is identified in SeaLifeBase

Description

A table of all the species found in SeaLifeBase, including taxonomic classification and the Species Code (SpecCode) by which the species is identified in SeaLifeBase

Author(s)

Carl Boettiger <carl@ropensci.org>
Description
spawning

Usage
spawning(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable 'FISHBASE_API', e.g. 'Sys.setenv(FISHBASE_API="sealifebase")'.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

... unused; for backwards compatibility only

Value

a table of species spawning

Examples

## Not run:
spawning("Oreochromis niloticus")

## End(Not run)
species

Description

Provide wrapper to work with species lists.

Usage

```r
species(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields`: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable `FISHBASE_API`. e.g. `Sys.setenv(FISHBASE_API="sealifebase")`.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the...
- `...`: unused; for backwards compatibility only

Details

The Species table is the heart of FishBase. This function provides a convenient way to query, tidy, and assemble data from that table given an entire list of species. For details, see: http://www.fishbase.org/manual/english/fishbasethe_species_table.htm

Species scientific names are defined according to fishbase taxonomy and nomenclature.

Value

a data.frame with rows for species and columns for the fields returned by the query (FishBase 'species' table)
species_by_ecosystem

Examples

```
## Not run:
species(c("Labroides bicolor", "Bolbometopon muricatum"))
species(c("Labroides bicolor", "Bolbometopon muricatum"), fields = species_fields$habitat)
```

## End(Not run)

---

**Description**

Species list by ecosystem

**Usage**

```
species_by_ecosystem(
  ecosystem,
  species_list = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

**Arguments**

- `ecosystem` (character) an ecosystem name
- `species_list` A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `server` can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version` a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db` the
- `...` unused; for backwards compatibility only

**Value**

a table of species ecosystems data
species_list

Examples

## Not run:
species_by_ecosystem(ecosystem = "Arctic", server = "sealifebase")

## End(Not run)

---

**species_fields**

*A list of the species_fields available*

---

**Description**

A list of the species_fields available

**Author(s)**

Carl Boettiger <carl@ropensci.org>

---

**species_list**

*species_list*

---

**Description**

Return the a species list given a taxonomic group

**Usage**

```r
species_list(
  Class = NULL,
  Order = NULL,
  Family = NULL,
  Subfamily = NULL,
  Genus = NULL,
  Species = NULL,
  SpecCode = NULL,
  SuperClass = NULL,
  server = getOption("FISHBASE_API", FISHBASE_API)
)
```
species_names

Arguments

Class Request all species in this taxonomic Class
Order Request all species in this taxonomic Order
Family Request all species in this taxonomic Family
Subfamily Request all species in this taxonomic SubFamily
Genus Request all species in this taxonomic Genus
Species Request all species in this taxonomic Species
SpecCode Request species name of species matching this SpecCode
SuperClass Request all species of this Superclass
server fishbase or sealifebase

Examples

```r
## All species in the Family
species_list(Family = "Scaridae")
## All species in the Genus
species_list(Genus = "Labroides")
```

Description

returns species names given FishBase’s SpecCodes

Usage

```r
species_names(
  codes,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db()
)
```

Arguments

codes a vector of speccodes (e.g. column from a table)
server can be set to either "fishbase" or "sealifebase" to switch between databases.
NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
version a version string for the database, will default to the latest release. see [get_releases()] for details.
db the
Value

A character vector of species names for the SpecCodes

speed

Description

speed

Usage

speed(
species_list = NULL,
fields = NULL,
server = getOption("FISHBASE_API", "fishbase"),
version = get_latest_release(),
db = default_db(),
...
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later
server can be set to either "fishbase" or "sealifebase" to switch between databases.
NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
version a version string for the database, will default to the latest release. see [get_releases()] for details.
db the
...
unused; for backwards compatibility only

Value

a table of species speed data

Examples

## Not run:
speed("Oreochromis niloticus")

## End(Not run)
Description

stocks

Usage

stocks(
    species_list = NULL,
    fields = NULL,
    server = getOption("FISHBASE_API", "fishbase"),
    version = get_latest_release(),
    db = default_db(),
    ...
)

Arguments

species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.

fields a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later

server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.

version a version string for the database, will default to the latest release. see [get_releases()] for details.

db the

... unused; for backwards compatibility only

Value

a table of species stocks data

Examples

## Not run:
stocks("Oreochromis niloticus")

## End(Not run)
Description

swimming

Usage

```r
swimming(
  species_list = NULL,
  fields = NULL,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `fields`: a character vector specifying which fields (columns) should be returned. By default, all available columns recognized by the parser are returned. Mostly for backwards compatibility as users can subset by column later.
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the
- `...`: unused; for backwards compatibility only

Value

a table of species swimming data

Examples

```r
## Not run:
swimming("Oreochromis niloticus")

## End(Not run)
```
Description
Check for alternate versions of a scientific name

Usage
synonyms(
species_list = NULL,
server = getOption("FISHBASE_API", "fishbase"),
version = get_latest_release(),
db = default_db(),
...
)

Arguments
species_list A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
server can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")
version a version string for the database, will default to the latest release. see [get_releases()] for details.
db the
...
unused; for backwards compatibility only

Details
For further information on fields returned, see: http://www.fishbase.org/manual/english/fishbasethe_synonyms_table.htm

Value
A table with information about the synonym. Will generally be only a single row if a species name is given. If a FishBase SpecCode is given, all synonyms matching that SpecCode are shown, and the table indicates which one is Valid for FishBase. This may or may not match the valid name for Catalog of Life (Col), also shown in the table. See examples for details.
validate_names

Description

Check for alternate versions of a scientific name and return the scientific names FishBase recognizes as valid.

Usage

```r
validate_names(
  species_list,
  server = getOption("FISHBASE_API", "fishbase"),
  version = get_latest_release(),
  db = default_db(),
  ...
)
```

Arguments

- `species_list`: A vector of scientific names (each element as "genus species"). If empty, a table for all fish will be returned.
- `server`: can be set to either "fishbase" or "sealifebase" to switch between databases. NOTE: it is usually easier to leave this as NULL and set the source instead using the environmental variable ‘FISHBASE_API’, e.g. ‘Sys.setenv(FISHBASE_API="sealifebase")’.
- `version`: a version string for the database, will default to the latest release. see [get_releases()] for details.
- `db`: the
- `...`: unused; for backwards compatibility only

Value

A string of the validated names

Examples

```r
validate_names("Abramites ternetzi")
```
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