

Package ‘avesperu’

December 5, 2024

Title Access to the List of Birds Species of Peru

Version 0.0.3

Description Allows access to the data found in the species list featured in the renowned 'List of the Birds of Peru' Plenge, M. A. (2023) <<https://sites.google.com/site/boletinunop/checklist>>. This publication stands as one of Peru's most comprehensive reviews of bird diversity. The dataset incorporates detailed species accounts and has been meticulously structured for effortless utilization within the R environment.

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Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.3.2

URL <https://github.com/PaulESantos/avesperu>,
<https://palesantos.github.io/avesperu/>

BugReports <https://github.com/PaulESantos/avesperu/issues>

Depends R (>= 2.10)

LazyData true

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NeedsCompilation no

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aves_peru_2023	<i>aves_peru_2023 Dataset</i>
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Description

The `aves_peru_2023` dataset comprises a tibble containing information regarding bird species documented in Peru, sourced from the "List of the Birds of Peru" compiled by M. A. Plenge in 2023. It encompasses various details, including scientific names, English names, Spanish names, order, family, and status of each species.

Usage

```
aves_peru_2023
```

Format

A tibble with 1,892 rows and 6 columns:

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

order The order to which the bird species belongs.

family The family to which the bird species belongs.

status Status of the bird species (e.g., resident, endémic, migratory, etc.).

Details

This dataset is designed to provide users with comprehensive information about the avian species found in Peru, as documented by M. A. Plenge. It is organized for easy access and utilization within the R environment.

Author(s)

Data compilation: M. A. Plenge, Package implementation: Paul Efren Santos Andrade

References

The dataset is based on the "List of the Birds of Peru" by M. A. Plenge.

See Also

For more information about the "avesperu" package and the data sources, visit the package's GitHub repository: <https://github.com/PaulESantos/avesperu>

Examples

```
# Load the avesperu package
library(avesperu)

# Access the avesperu_tab dataset
data("aves_peru_2023")

# Display the first few rows
head(aves_peru_2023)
```

aves_peru_2024	<i>aves_peru_2024 Dataset</i>
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Description

The `aves_peru_2024` dataset contains a tibble that provides information on bird species recorded in Peru, based on the "List of the Birds of Peru" by M. A. Plenge (last updated on March 6, 2024). It includes details such as scientific names, English names, Spanish names, order, family, and status of each species.

Usage

```
aves_peru_2024
```

Format

A tibble with 1,901 rows and 6 columns:

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

order The order to which the bird species belongs.

family The family to which the bird species belongs.

status Status of the bird species (e.g., resident, endemic, migratory, etc.).

Details

This dataset is designed to provide users with comprehensive information about the avian species found in Peru, as documented by M. A. Plenge. It is organized for easy access and utilization within the R environment.

Author(s)

Data compilation: M. A. Plenge, Package implementation: Paul Efren Santos Andrade

References

The dataset is based on the "List of the Birds of Peru" by M. A. Plenge. The citation for the list is as follows: Plenge, M. A. Version (09-03-2024). List of the birds of Peru / Lista de las aves del Perú. Unión de Ornitólogos del Perú: <https://sites.google.com/site/boletinunop/checklist>

See Also

For more information about the "avesperu" package and the data sources, visit the package's GitHub repository: <https://github.com/PaulESantos/avesperu>

Examples

```
# Load the avesperu package
library(avesperu)

# Access the avesperu_tab dataset
data("aves_peru_2024")

# Display the first few rows
head(aves_peru_2024)
```

aves_peru_2024_v2 *aves_peru_2024_v2 Dataset*

Description

The `aves_peru_2024_v2` dataset provides an updated tibble of bird species recorded in Peru, based on the latest taxonomic revisions by the South American Checklist Committee (SACC).

Usage

```
aves_peru_2024_v2
```

Format

A tibble with 1,909 rows and 6 columns:

order_name Taxonomic order to which the bird species belongs.

family_name Taxonomic family to which the bird species belongs.

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

status Category indicating the species' status, based on the following codes: X - Resident species. E - Endemic species. NB - Migratory species. V - Vagrant species. IN - Introduced species. EX - Extirpated species. H - Hypothetical species.

Details

This version incorporates significant taxonomic changes, new categories, and updates derived from recent publications, photographs, and sound recordings archived in accredited institutions.

- **Total species:** 1,909
- **Distribution by status:**
 - X: 1,542 species
 - E: 117 species
 - NB: 138 species
 - V: 83 species
 - IN: 3 species
 - EX: 0 species
 - H: 26 species

Species near Peru's borders with Ecuador, Colombia, Brazil, and Chile are included at the end of the list as potential additions to the Peruvian bird inventory. These updates reflect the SACC's ongoing efforts to evaluate and recognize certain subspecies as full species.

Author(s)

Data compilation: Manuel A. Plenge Package implementation: Paul Efren Santos Andrade

References

Plenge, M. A. (2024). Lista de las aves del Perú. Last updated: December 2, 2024. Unión de Ornitólogos del Perú.

See Also

For more information about the taxonomy, visit the South American Checklist Committee (SACC) website: <https://sites.google.com/site/boletinunop/checklist>

Examples

```
# Load the dataset
data("aves_peru_2024_v2")

# Display the first few rows
head(aves_peru_2024_v2)
```

search_avesperu *Search for Bird Species Data in the Birds of Peru Dataset*

Description

This function searches for bird species information in the dataset provided by the `avesperu` package, given a list of species names. It supports approximate (fuzzy) matching to handle typographical errors or minor variations in the species names. The function returns detailed information for each species, including taxonomic data, common names, and status.

Usage

```
search_avesperu(splist, max_distance = 0.1)
```

Arguments

<code>splist</code>	A character vector containing the names of bird species to search for. Names can include minor variations or typos.
<code>max_distance</code>	Numeric. The maximum allowable distance for fuzzy matching, which can either be a proportion ($0 < \text{max_distance} < 1$) or an integer representing the maximum number of allowed differences. Defaults to 0.1.

Details

The function performs the following steps:

1. Validates the input, ensuring that `splist` is a character vector or a factor.
2. Standardizes species names and identifies duplicate entries in the list.
3. For each unique species name, it searches for matches in the dataset using approximate string matching (`agrep`), with a customizable `max_distance`.
4. Retrieves the taxonomic and common name data for the closest matching species.

If no matches are found for a species, the corresponding row in the output will contain NA values.

Value

A data frame with the following columns:

name_submitted The species name provided as input.
accepted_name The closest matching species name from the dataset, or NA if no match is found.
order_name The taxonomic order of the species.
family_name The taxonomic family of the species.
english_name The common name of the species in English.
spanish_name The common name of the species in Spanish.
status The conservation or other status of the species.
dist The computed distance between the submitted name and the matched name.

Examples

```
# Example: Search for bird species in the dataset
splist <- c("Falco sparverius", "Tinamus osgodi", "Crypturellus soui",
            "Thraupis palmarum", "Thamnophilus praecox")
search_avesperu(splist)
```

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