# Package 'NatureSounds'

October 12, 2022

Type Package														
Title Animal Sounds for Bioacustic Analysis														
Version 1.0.4														
Date 2021-04-20														
Author Marcelo Araya-Salas [aut, cre]														
Maintainer Marcelo Araya-Salas <marcelo.araya@ucr.ac.cr></marcelo.araya@ucr.ac.cr>														
Description Collection of example animal sounds for bioacoustic analysis.														
License GPL (>= 2)														
Imports tuneR														
<b>Depends</b> R (>= 3.2.1), knitr														
LazyData TRUE														
<pre>URL https://github.com/maRce10/NatureSounds</pre>														
BugReports https://github.com/maRce10/NatureSounds/issues														
NeedsCompilation no														
Suggests rmarkdown														
VignetteBuilder knitr														
RoxygenNote 7.1.1														
Repository CRAN														
<b>Date/Publication</b> 2021-04-23 04:30:11 UTC														
R topics documented:														
Cryp.soui       2         lbh.est       2         monk.parakeet.est       3         NatureSounds       4         Phae.long.est       4         Phae.long1       5         Phae.long2       5														

2 lbh.est

Index																									8
	thyroptera.est	•		•			•											•						,	7
	Phae.long4 .																								6
	Phae.long3 .					•				•	•	•		•			•		•						6

Cryp.soui

Acoustic recording of Crypturellus soui (Little Tinamou).

# **Description**

Acoustic recording of Crypturellus soui (Little Tinamou).

# Usage

```
data(Cryp.soui)
```

#### **Format**

One .wav file:

Cryp.soui Crypturellus soui recording

#### Source

```
https://www.xeno-canto.org/154190
```

1bh.est

Extended selection table of Phaethornis longirostris songs

# **Description**

'lbh.est' contains an *extented selection table* following the warbleR package object format. The data contains the annotations and wave objects of 50 long-billed hermit songs from 10 different song types (5 per song type, 'lek.song.type' column) recorded at 8 leks ('lek' column) in the Caribbean slope of Costa Rica.

# Usage

```
data(lbh.est)
```

#### **Format**

One object of class extended selection table (following warbleR package format) and data frame.

# **Details**

Extended selection table of *Phaethornis longirostris* (Long-billed Hermit) songs.

monk.parakeet.est 3

# References

Araya-Salas M, G Smith-vidaurre, D Mennill, P Gonzalez-Gomez, J Cahill & T Wright. 2019. Social group signatures in hummingbird displays provide evidence of co-occurrence of vocal and visual learning. Proceedings of the Royal Society B. 286: 20190666

monk.parakeet.est

Extended selection table of monk parakeet contact calls

# **Description**

'monk.parakeet.est' contains an *extented selection table* following the warbleR package object format. The data contains the annotations and wave objects of 52 monk parake calls from four different social scales (flock individual, pair, site, 'scale' column). The 'ID' column labels selections belonging to the same individual when 'scale == "Individual'. See Smith-Vidaurre, Araya-Salas & Wright (2019) for more details.

#### Usage

data(monk.parakeet.est)

# Format

One object of class extended selection table (following warbleR package format) and data frame.

# **Details**

Extended selection table of monk parakeet (Myiopsitta monachus) contact calls.

#### **Source**

Data used in Smith-Vidaurre, Araya-Salas & Wright (2019)

#### References

Smith-Vidaurre G, Araya-Salas M, & Wright T F. 2019. Individual signatures outweigh social group identity in contact calls of a communally nesting parrot. Behavioral Ecology.

4 Phae.long.est

NatureSounds

AnimalSounds: Animal Sounds for Bioacustic Analysis

# **Description**

NatureSounds is a package containing a collection of example animal sounds for bioacoustic analysis. The main goal is to provide example recordings to faciliate the development of bioacoustic tools in the R environment.

#### **Details**

Most data sets are provided as extended selection tables. These are R objects that contains both the annotations (locations of signals in time and frequency) and the corresponding acoustic data as wave objects. Therefore, these are \*\*self-contained objects\*\* since the original sound files are no longer needed to perform acoustic analyses. These objects are created by the 'selection\_table()' function from warbleR. Take a look at the intro to warbleR vignette for more details. Check out the packages warbleR, tuneR and seewave for sound file manipulation and analysis in R.

License: GPL (>= 2)

#### Author(s)

Marcelo Araya-Salas Maintainer: Marcelo Araya-Salas (<marceloa27@gmail.com>)

Phae.long.est

Extended selection table of Phaethornis longirostris songs

# **Description**

'Phae.long.est' contains an *extented selection table* following the warbleR package object format. The data contains the annotations and wave objects of 50 long-billed hermit songs from 10 different song types (5 per song type, 'lek.song.type' column) recorded at 8 leks ('lek' column) in the Caribbean slope of Costa Rica. THIS DATA SET HAS BEEN RENAMED AS 'lbh.est'. 'Phae.long.est' WILL BE DEPRECATED IN FUTURE VERSIONS.

# Usage

```
data(Phae.long.est)
```

#### **Format**

One object of class extended selection table (following warbleR package format) and data frame.

# Details

Extended selection table of *Phaethornis longirostris* (Long-billed Hermit) songs.

Phae.long1 5

# References

Araya-Salas M, G Smith-vidaurre, D Mennill, P Gonzalez-Gomez, J Cahill & T Wright. 2019. Social group signatures in hummingbird displays provide evidence of co-occurrence of vocal and visual learning. Proceedings of the Royal Society B. 286: 20190666

Phae.long1

Audio recording #1 of Phaethornis longirostris

# **Description**

Audio recording #1 of Phaethornis longirostris (Long-billed Hermit).

# Usage

```
data(Phae.long1)
```

# **Format**

One .wav file:

Phae.long1 Phaethornis longirostris #1 recording

#### Source

https://www.xeno-canto.org/contributor/EMCWQLLKEW

Phae.long2

Audio recording #2 of Phaethornis longirostris

# **Description**

Audio recording #2 of Phaethornis longirostris (Long-billed Hermit).

# Usage

```
data(Phae.long2)
```

# **Format**

One .wav file:

Phae.long2 Phaethornis longirostris #2 recording

#### **Source**

https://www.xeno-canto.org/contributor/EMCWQLLKEW

Phae.long4

Phae.long3

Audio recording #3 of Phaethornis longirostris

# **Description**

Audio recording #3 of Phaethornis longirostris (Long-billed Hermit).

# Usage

```
data(Phae.long3)
```

# **Format**

One .wav file:

Phae.long3 Phaethornis longirostris #3 recording

# Source

https://www.xeno-canto.org/contributor/EMCWQLLKEW

Phae.long4

Audio recording #4 of Phaethornis longirostris

# Description

Audio recording #4 of Phaethornis longirostris (Long-billed Hermit).

# Usage

```
data(Phae.long4)
```

# **Format**

One .wav file:

Phae.long4 Phaethornis longirostris #4 recording

# **Source**

https://www.xeno-canto.org/contributor/EMCWQLLKEW

thyroptera.est 7

thyroptera.est

Extended selection table of Spix's disc-winged bat social calls

# Description

'thyroptera.est' contains an *extented selection table* following the warbleR package object format. The data contains the annotations and wave objects of 32 Spix's disc-winged bats social calls from 8 individuals ('id' column) belonging to 4 social groups ('group' column). See Araya-Salas et al (2020) for more details. Can be used (among other things) to test for individual and group acoustic signatures.

# Usage

data(thyroptera.est)

# **Format**

One object of class extended selection table (following warbleR package format) and data frame.

# **Details**

Extended selection table of Spix's disc-winged bats (Thyroptera) social calls.

# **Source**

Data used in Araya-Salas et al (2020)

# References

Araya-Salas M, A Hernandez-Pinson, N Rojas, G Chaverri. 2020. Ontogeny of an interactive call-and-response system in Spix's disc-winged bats. Animal Behaviour.

# **Index**

```
\ast datasets
    Cryp.soui, 2
    1bh.est, 2
    \verb|monk.parakeet.est|, 3
    Phae.long.est, 4
    Phae.long1,5
    Phae.long2, 5
    Phae.long3,6
    Phae.long4,6
    thyroptera.est, 7
Cryp.soui, 2
1bh.est, 2
monk.parakeet.est, 3
NatureSounds, 4
Phae.long.est, 4
Phae.long1, 5
Phae.long2, 5
Phae.long3,6
Phae.long4, 6
thyroptera.est, 7
```