Package 'fishdata'

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Type Package

Title A Small Collection of Fish Population Datasets

Version 1.0.1

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Description A collection of four datasets
based around the population dynamics of migratory fish. Datasets
contain both basic size information on a per fish basis, as well as
otolith data that contains a per day record of fish growth history.
All data in this package was collected by the author, from
2015-2016, in the Wellington region of New Zealand.

License GPL-3

Depends R (>= 2.10)

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

Suggests knitr, rmarkdown, dplyr, magrittr, dm, ggplot2, tidyr,
DiagrammeRsvg, DiagrammeR

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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R topics documented:

`adults` *Base table of adult fish sample sites and dates.*

Description

A dataset containing base location and time catch information for adult Galaxis maculatus.

Usage

```
adults
```

Format

A dataset containing 48 rows and 4 variables

fish_code Primary key, uniquely identifies a fish

site Site where fish was caught

day Day group fish was caught on (H1 = 1st day fishing, H3 = 3rd day fishing). Used for by-day grouping analysis. For actual catch date see 'catch_date'

catch_date Date that the fish was caught on

Examples

```
data(adults)
```

`adult_growth` *Growth data of adult fish*

Description

A dataset containing daily age and growth data for adult Galaxis maculatus.

Usage

```
adult_growth
```

Format

A dataset containing 16795 rows and 4 variables

fish_code Foreign key, matches to 'adults'. Identifies the fish being measured.

period a count of each otolith increment. Counts a day in the fishes life

position the distance of the increment from the centre of the otolith

distance the distance of the increment from the previous increment

Examples

```
data(adult_growth)
```

`adult_metrics` *Adult fish metrics data*

Description

A dataset containing metrics data for adult Galaxis maculatus.

Usage

```
adult_metrics
```

Format

A dataset containing 48 rows and 6 variables

fish_id a unique identifier for each fish

standard_length standard length of the fish (distance from posterior to caudal peduncle), cm

body_depth body depth of the fish at its maximum point, cm

age Age of fish when caught (days)

birthdate Day fish hatched

growth_rate Average daily growth of fish (mm/day)

Examples

```
data(adult_metrics)
```

`juveniles` *Base table of juvenile fish sample sites and dates.*

Description

A dataset containing base location and time catch information for juvenile Galaxis maculatus.

Usage

```
juveniles
```

Format

A dataset containing 496 rows and 7 variables

fish_code Primary key, uniquely identifies each fish

fish Alternate key

otolith_code Alternate key

site Site that fish was caught on

day Day group that the fish was collected on (1 = 1st fishing day, 5 = 5th fishing day). For exact catch date, see 'catch_date'

month Month that the fish was collected on

catch_date Day that fish was caught on

Examples

```
data(juveniles)
```

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juvenile_growth *Growth data of juvenile fish*

Description

A dataset containing daily growth data for juvenile Galaxis maculatus.

Usage

```
juvenile_growth
```

Format

A dataset containing 87581 rows and 5 variables

fish_code Foreign key, links with 'juveniles'

otolith_code Alternate key

period a count of each otolith increment. Counts a day in the fishes life

position the distance of the increment from the centre of the otolith

distance the distance of the increment from the previous increment

Examples

```
data(juvenile_growth)
```

`juvenile_metrics` *Juvenile fish metrics data*

Description

A dataset containing metrics data for juvenile Galaxis maculatus.

Usage

```
juvenile_metrics
```

Format

A dataset containing 496 rows and 8 variables

fish_code Foreign key (matches with 'juveniles')

standard_length standard length of the fish (distance from posterior to caudal peduncle), cm

body_depth body depth of the fish at its maximum point, cm

age Age of fish when caught (days)

birthdate Day fish hatched

growth_rate Average daily growth of fish (mm/day)

growth_rate Average daily growth of fish over first 10 days of life (mm/day)

growth_rate Average daily growth of fish over last 10 days of life (mm/day)

Examples

```
data(juvenile_metrics)
```

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