

# Package: icesUtils (via r-universe)

May 28, 2026

**Version** 0.1.3

**Title** Functions for processing ICES data and producing ICES shiny applications

**Depends** R (>= 4.3)

**Imports** htmltools, icesSAG, icesSD, icesVocab, readxl, jsonlite

**Suggests** shiny

**Description** A collection of functions useful for processing ICES data and making ICES shiny apps.

**License** GPL (>= 2)

**URL** <https://github.com/ices-tools-dev/icesUtils>,  
<https://ices-tools-prod.r-universe.dev/icesUtils>

**BugReports** <https://github.com/ices-tools-dev/icesUtils/issues>

**RoxygenNote** 7.3.3

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**Repository** <https://ices-tools-prod.r-universe.dev>

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icesUtils-package	<i>Functions for processing ICES data and producing ICES shiny applications</i>
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## Description

A collection of functions useful for processing ICES data and making ICES shiny apps.

## Details

*Group of functions:*

[first\\_function](#) example function

## Author(s)

**Maintainer:** Colin Millar <colin.millar@ices.dk>

Authors:

- Luca Lamoni
- Neil Maginnis

## References

ICES Stock Assessment Graphs database: <http://sg.ices.dk>.

ICES Stock Assessment Graphs web services: <http://sg.ices.dk/webservices.aspx>.

## See Also

Useful links:

- <https://github.com/ices-tools-dev/icesUtils>
- <https://ices-tools-prod.r-universe.dev/icesUtils>
- Report bugs at <https://github.com/ices-tools-dev/icesUtils/issues>

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first_function	<i>Get summary data for a stock</i>
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**Description**

Find the summary data for a specific stock in a given assessment year.

**Usage**

```
first_function(stock, year)
```

**Arguments**

stock	a stock name, e.g. cod-347d, or cod to find all cod stocks, or NULL (default) to process all stocks.
year	the assessment year, e.g. 2015, or 0 to process all years.

**Details**

This function retrieves summary data for a specified stock and year from the SAG and SD Databases. It first validates the stock code against the ICES vocabulary database, then fetches stock information from the Stock Data (SD) database, and the summary table data from the Stock Assessment Graphs (SAG) database.

The results from both sources are combined into a single dataframe which is returned to the user.

**Value**

A dataframe.

**Author(s)**

Colin Millar.

**See Also**

[getSAG](#) gets summary table from SAG DB. [icesSAG-package](#) gives an overview of the icesSAG package.

[icesUtils-package](#) gives an overview of the icesUtils package.

**Examples**

```
assessment_summary <- first_function("had.27.46a20", 2023)
head(assessment_summary)
```

get\_bycatch\_ecoregion *Retrieve bycatch advice results for a given ecoregion*

---

### Description

Queries the ICES bycatch API and returns the bycatch advice results for a specified ecoregion.

### Usage

```
get_bycatch_ecoregion(Ecoregion)
```

### Arguments

Ecoregion	A character string giving the ecoregion name to be passed to the ICES bycatch API.
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### Details

This function builds the API request URL using the supplied ecoregion name, URL-encodes it, and parses the JSON response with 'jsonlite::fromJSON()'.  
It does not perform validation of the API response, so downstream cleaning is usually needed before plotting or analysis.

### Value

A data frame or list, depending on the API response structure, containing bycatch advice results for the requested ecoregion.

### Examples

```
## Not run:  
bycatch_raw <- get_bycatch_ecoregion("Greater North Sea")  
  
## End(Not run)
```

---

image\_fullscreen\_on\_click\_js  
*JavaScript to view image fullscreen on click*

---

### Description

Adds a JavaScript handler that lets users click on an image to enter/exit fullscreen

### Usage

```
image_fullscreen_on_click_js()
```

**Value**

A script tag containing JavaScript code.

**Examples**

```
if (requireNamespace("shiny", quietly = TRUE) && interactive()) {
  library(shiny)

  addResourcePath(
    "mypkg",
    system.file("www", package = "icesUtils")
  )

  ui <- navbarPage(
    header = image_fullscreen_on_click_js(),
    title = "Example",
    "Click for full screen",
    tags$img(src = "mypkg/example-image.png", id = "demo-img", width = "300px", height = "300px")
  )

  server <- function(input, output, session) {}

  shinyApp(ui, server)
}
```

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navbar\_dropdown\_autoclose\_js

*JavaScript to close navbar dropdown after navigation via actionbut-  
tons or other non-navbar input*

---

**Description**

Adds a JavaScript handler that closes open navbar dropdown menus when clicking outside the navbar.

**Usage**

```
navbar_dropdown_autoclose_js()
```

**Value**

A script tag containing JavaScript code.

**Examples**

```
if (requireNamespace("shiny", quietly = TRUE) && interactive()) {
  library(shiny)
  ui <-
  navbarPage(header = navbar_dropdown_autoclose_js(),
```

```

    id = "main-navbar",
    title = "Example",
    navbarMenu(
      "Menu",
      tabPanel("A", value = "tab_a", actionButton("navigate2B", "Go to Tab B")),
      tabPanel("B", value = "tab_b", actionButton("navigate2A", "Go to Tab A"))
    )
  )
)

server <- function(input, output, session) {
  observeEvent(input$navigate2B, {
    updateNavbarPage(session, inputId = "main-navbar", selected = "tab_b")
  })

  observeEvent(input$navigate2A, {
    updateNavbarPage(session, inputId = "main-navbar", selected = "tab_a")
  })
}

shinyApp(ui, server)
}

```

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```
prepare_nested_text_lists_from_excel
```

*Create a named nested list of dataframes containing text content, from excel files and a vector of names.*

---

## Description

Uses `prepare_text_from_excel` to make a nested list containing text content extractable by *section*. Requires that *paths* and *names* are vectors of equal length. Output works with `select_text` where *names* gives the *top\_level* parameter to `select_text`. vector of names an excel file into a list of dataframes. Works with `usethis::use_data` and `select_text` to provide a simple means of incorporating text in shiny applications. To work with `usethis::use_data` the excel file should have named tabs,

## Usage

```
prepare_nested_text_lists_from_excel(paths, names)
```

## Arguments

<code>paths</code>	valid paths provided either as vector or list
<code>names</code>	list or vector of characters

## See Also

[prepare\\_text\\_from\\_excel](#) converts texts provided via a single excel file into a structure that `select_text` can work with. Used by this function on each file provided.

[select\\_text](#) extracts individual texts by tab, section and, optionally, top-level names.

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prepare\_text\_from\_excel

*Generate a list of dataframes containing text content, from excel*

---

## Description

Converts an excel file into a list of dataframes. Works with `usethis::use_data` and `select_text` to provide a simple means of incorporating text in shiny applications. To work with `usethis::use_data` the excel file should have named tabs, each tab having 2 columns, **section** and **text**. *text* is the content, *section* is used by `select_text` to extract the relevant section. Texts provided in *text* are wrapped in the HTML paragraph tag `<p>`.

## Usage

```
prepare_text_from_excel(path_to_file)
```

## Arguments

`path_to_file` path to the file containing text content

## Value

a list of dataframes

## See Also

[prepare\\_nested\\_text\\_lists\\_from\\_excel](#) converts texts in multiple files into a hierarchical structure that `select_text` can work with.

[select\\_text](#) extracts individual texts by tab, section and, optionally, top-level names.

## Examples

```
example_path <- system.file("extdata", "text_function_example.xlsx", package = "icesUtils")
prepare_text_from_excel(path_to_file = example_path)
```

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select_text	<i>Get text to display from list of dfs.</i>
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### Description

display\_text' subsets a list of dataframes and extracts the relevant section of text for tab and section. If top\_level is supplied, accepts a named list of lists, and filters the top level list by top\_level name.

### Usage

```
select_text(list_of_texts, tab, section = NULL)
```

### Arguments

list_of_texts	a list of dataframes each containing 'section' and 'text' columns
tab	a character vector - the name of a list entry
section	a character vector indicating which row to extract

### Value

A character string

### Author(s)

Neil Maginnis

### See Also

[prepare\\_text\\_from\\_excel](#) is a function that converts texts provided via an excel file into a structure that select\_text can work with.

[prepare\\_nested\\_text\\_lists\\_from\\_excel](#) converts texts in multiple files into a hierarchical structure that select\_text can work with.

### Examples

```
greetings <- data.frame(section = c("welcome", "goodbye"),
  text = c("Hello world", "Thanks for stopping by"))
content <- data.frame(section = "help", text = "Use the function as shown here")
texts <- list(greetings=greetings, content = content)
select_text(list_of_texts = texts, "greetings", "welcome")
select_text(list_of_texts = texts, "content", "help")
select_text(list_of_texts = texts, "greetings", "goodbye")
```

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