

# Package ‘wikilake’

May 8, 2026

**Title** Scrape Lake Metadata Tables from Wikipedia

**Version** 0.7.0

**Description** Scrape lake metadata tables from Wikipedia <<https://www.wikipedia.org/>>.

**Imports** rvest, stringi, WikipediR, xml2, sp, graphics, stringr,  
selectr, units, dplyr, tidyr

**URL** <https://github.com/jsta/wikilake>

**BugReports** <https://github.com/jsta/wikilake/issues>

**Depends** R (>= 3.3.0), maps

**License** GPL (>= 2)

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.2.3

**Suggests** knitr, rmarkdown, testthat, reticulate

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

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|                  |  |
|------------------|--|
| wikilake-package | <i>Scrape Wikipedia lakes metadata</i> |
|------------------|--|

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### Description

Scrape Wikipedia lakes metadata

### Author(s)

<stachel2@msu.edu>

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|        |               |
|--------|---------------|
| dms2dd | <i>dms2dd</i> |
|--------|---------------|

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### Description

Convert numeric coordinate vectors in degrees, minutes, and seconds to decimal degrees

### Usage

```
dms2dd(x)
```

### Arguments

x                    numeric vector of length 3 corresponding to degrees, minutes, and seconds

### Examples

```
dt <- rbind(c(25,12,53.66),c(-80,32,00.61))
apply(dt, 1, function(x) dms2dd(x))
```

---

|               |                      |
|---------------|----------------------|
| get_lake_wiki | <i>get_lake_wiki</i> |
|---------------|----------------------|

---

**Description**

get\_lake\_wiki

**Usage**

```
get_lake_wiki(lake_name, cond = NA)
```

**Arguments**

|           |                              |
|-----------|------------------------------|
| lake_name | character                    |
| cond      | character stopping condition |

**Examples**

```
## Not run:  
get_lake_wiki("Lake Nipigon")  
  
## End(Not run)
```

---

|            |                                  |
|------------|----------------------------------|
| lake_clean | <i>Clean output of lake_wiki</i> |
|------------|----------------------------------|

---

**Description**

Currently the only operation is to standardize the units of numeric fields. See the output units with the `unit_key_` function.

**Usage**

```
lake_clean(dt)
```

**Arguments**

|    |                                  |
|----|----------------------------------|
| dt | output of the lake_wiki function |
|----|----------------------------------|

**Examples**

```
## Not run:  
dt <- lake_wiki(c("Lake Mendota", "Flagstaff Lake (Maine)"))  
dt_clean <- lake_clean(dt)  
  
dt <- lake_wiki(c("Lake Mendota", "Trout Lake (Wisconsin)"))  
dt_clean <- lake_clean(dt)  
  
## End(Not run)
```

---

|           |                  |
|-----------|------------------|
| lake_wiki | <i>lake_wiki</i> |
|-----------|------------------|

---

## Description

lake\_wiki

## Usage

```
lake_wiki(lake_name, map = FALSE, clean = TRUE, ...)
```

## Arguments

|           |   |
|-----------|---|
| lake_name | character   |
| map       | logical produce map of lake location?                               |
| clean     | logical enforce standardized units following wikilake::unit_key_()? |
| ...       | arguments passed to maps::map                                       |

## Examples

```
## Not run:
lake_wiki("Lake Peipsi")
lake_wiki("Flagstaff Lake (Maine)")
lake_wiki("Lake George (Michigan-Ontario)")
lake_wiki("Lake Michigan", map = TRUE, "usa")
lake_wiki("Lac La Belle, Michigan")
lake_wiki("Lake Antoine")
lake_wiki("Lake Baikal")
lake_wiki("Dockery Lake (Michigan)")
lake_wiki("Coldwater Lake")
lake_wiki("Bankson Lake")
lake_wiki("Fisher Lake (Michigan)")
lake_wiki("Beals Lake")
lake_wiki("Devils Lake (Michigan)")
lake_wiki("Lake Michigan")
lake_wiki("Fletcher Pond")
lake_wiki("Lake Bella Vista (Michigan)")
lake_wiki("Lake Mendota")
lake_wiki("Lake Mendota", map = TRUE, "usa")
lake_wiki("Lake Nipigon", map = TRUE, regions = "Canada")
lake_wiki("Trout Lake (Wisconsin)")

# a vector of lake names
lake_wiki(c("Lake Mendota", "Trout Lake (Wisconsin)"))
lake_wiki(c("Lake Mendota", "Trout Lake (Wisconsin)"), map = TRUE)

# throws warning on redirects
lake_wiki("Beals Lake")
```

```
# ignore notability box
lake_wiki("Rainbow Lake (Waterford Township, Michigan)")

## End(Not run)
```

---

lake\_wiki\_browser      *lake\_wiki\_browser*

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### Description

lake\_wiki\_browser

### Usage

```
lake_wiki_browser(lake_wiki_obj = NA, lake_names = NA)
```

### Arguments

lake\_wiki\_obj    data.frame output of lake\_wiki  
lake\_names      fallback character vector of lake names

### Examples

```
## Not run:
lake_wiki_browser(lake_names = "Lake Mendota")
lake_wiki_browser(lake_names = c("Lake Mendota", "Lake Champlain"))
lake_wiki_browser(lake_wiki(c("Lake Mendota", "Lake Champlain")))

## End(Not run)
```

---

map\_lake\_wiki      *map\_lake\_wiki*

---

### Description

map\_lake\_wiki

### Usage

```
map_lake_wiki(res, ...)
```

### Arguments

res              data.frame output of get\_lake\_wiki  
...              arguments passed to maps::map

**Examples**

```
## Not run:  
map_lake_wiki(lake_wiki("Corey Lake"), database = "usa")  
  
map_lake_wiki(lake_wiki("Lake Nipigon"), regions = "Canada")  
  
## End(Not run)
```

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milakes

*Michigan Lakes*

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**Description**

Metadata of Michigan lakes scraped from Wikipedia.

**Format**

A data frame with 48 columns and 177 rows:

- Name: lake name
- Location: location description
- Primary inflows: rivers and streams
- Basin countries: countries
- Surface area: hectares
- Max. depth: meters
- Surface elevation: meters
- Lat: decimal degrees
- Lon: decimal degrees
- Primary outflows: rivers and streams
- Average depth: meters
- Max. length: meters
- Max. width: meters

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parse\_unit\_brackets *Parse string representation of units package quantities*

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**Description**

Parse string representation of units package quantities

**Usage**

```
parse_unit_brackets(x, target_unit = NA)
```

**Arguments**

x                    character string with unit in brackets  
target\_unit        target unit to convert to. optional

**Examples**

```
x <- "1 [m]"  
x <- "8.5 [m]"  
parse_unit_brackets(x, "feet")
```

---

tidy\_lake\_df            *tidy\_lake\_df*

---

**Description**

tidy\_lake\_df

**Usage**

```
tidy_lake_df(lake)
```

**Arguments**

lake                    data.frame output of get\_lake\_wiki

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