# Package 'ncaavolleyballr'

July 23, 2025

Type Package

Title Extract Data from NCAA Women's and Men's Volleyball Website

Version 0.4.3

Maintainer Jeffrey R. Stevens < jeffrey.r.stevens@protonmail.com>

Description Extracts team records/schedules and player statistics for the 2020-2024 National Collegiate Athletic Association (NCAA) women's and men's divisions I, II, and III volleyball teams from <a href="https://stats.ncaa.org">https://stats.ncaa.org</a>. Functions can aggregate statistics for teams, conferences, divisions, or custom groups of teams.

License MIT + file LICENSE

**Encoding** UTF-8

LazyData true

**Depends** R (>= 4.2)

```
RoxygenNote 7.3.2
```

**Imports** cli, curl, dplyr, httr2, lifecycle, purrr, rlang, rvest, stringr, tibble, tidyr, xml2

Suggests chromote, knitr, rmarkdown, testthat (>= 3.0.0)

- **Config/testthat/edition** 3
- URL https://github.com/JeffreyRStevens/ncaavolleyballr,

https://jeffreyrstevens.github.io/ncaavolleyballr/

BugReports https://github.com/JeffreyRStevens/ncaavolleyballr/issues

VignetteBuilder knitr

NeedsCompilation no

Author Jeffrey R. Stevens [aut, cre, cph] (ORCID: <https://orcid.org/0000-0003-2375-1360>)

**Repository** CRAN

Date/Publication 2025-07-22 22:40:02 UTC

# Contents

conference_stats	2
division_stats	3
find_team_contests	4
find_team_id	5
find_team_name	6
get_teams	6
group_stats	7
match_pbp	8
mvb_teams	9
ncaa_conferences	10
ncaa_sports	10
ncaa_teams	
player_match_stats	12
player_season_stats	13
team_match_stats	13
team_season_info	14
team_season_stats	15
wvb_teams	16
	17
	17

# conference\_stats Aggregate player statistics for a NCAA conference and seasons

# Description

Index

This is a wrapper around group\_stats() that extracts season, match, or pbp data from players in all teams in the chosen conference. For season stats, it aggregates all player data and team data into separate data frames and combines them into a list. For match and pbp stats, it aggregates into a data frame. Conferences names can be found in ncaa\_conferences.

# Usage

```
conference_stats(
  year = NULL,
  conf = NULL,
  level = NULL,
  sport = "WVB",
  save = FALSE,
  path = "."
)
```

#### division\_stats

#### Arguments

year	Numeric vector of years for fall of desired seasons.
conf	NCAA conference name.
level	Character string defining whether to aggregate "season", "match", or play-by-play ("pbp") data.
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).
save	Logical for whether to save the statistics locally as CSVs (default FALSE).
path	Character string of path to save statistics files.

#### Value

For season level, returns list with data frames of player statistics and team statistics. For match and pbp levels, returns data frame of player statistics and play-by-play information respectively.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

# See Also

Other functions that aggregate statistics: division\_stats(), group\_stats()

#### Examples

```
conference_stats(year = 2024, conf = "Peach Belt", level = "season")
```

division\_stats Aggregate player statistics for a NCAA division and seasons

# Description

This is a wrapper around group\_stats() that extracts season, match, or pbp data from players in all teams in the chosen division. For season stats, it aggregates all player data and team data into separate data frames and combines them into a list. For match and pbp stats, it aggregates into a data frame.

## Usage

```
division_stats(
  year = NULL,
  division = 1,
  level = NULL,
  sport = "WVB",
  save = FALSE,
  path = "."
)
```

# Arguments

year	Numeric vector of years for fall of desired seasons.
division	NCAA division (must be 1, 2, or 3).
level	Character string defining whether to aggregate "season", "match", or play-by-play ("pbp") data.
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).
save	Logical for whether to save the statistics locally as CSVs (default FALSE).
path	Character string of path to save statistics files.

#### Value

For season level, returns list with data frames of player statistics and team statistics. For match and pbp levels, returns data frame of player statistics and play-by-play information respectively.

# Note

This function requires internet connectivity as it checks the NCAA website for information.

# See Also

Other functions that aggregate statistics: conference\_stats(), group\_stats()

find\_team\_contests Extract date, opponent, and contest ID for team and season

# Description

NCAA datasets use a unique ID for each sport, team, season, and match. This function returns a data frame of dates, opponent team names, and contest IDs for each NCAA contest (volleyball match) for each team and season.

#### Usage

```
find_team_contests(team_id = NULL)
```

#### Arguments

team\_id Team ID determined by NCAA for season. To find ID, use find\_team\_id().

# Value

Returns a data frame that includes date, team, opponent, and contest ID for each season's contest.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

# find\_team\_id

# Examples

find\_team\_contests(team\_id = "585290")

find\_team\_id Find team ID for season

#### Description

NCAA datasets use a unique ID for each team and season. To access a team's data, we must know the volleyball team ID. This function looks up the team ID from wvb\_teams or mvb\_teams using the team name. Team names can be found in ncaa\_teams or searched with find\_team\_name().

#### Usage

find\_team\_id(team = NULL, year = NULL, sport = "WVB")

# Arguments

team	Name of school. Must match name used by NCAA. Find exact team name with find_team_name().
year	Numeric vector of years for fall of desired seasons.
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).

# Value

Returns a character string of team ID.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

#### See Also

Other search functions: find\_team\_name()

#### Examples

```
find_team_id(team = "Nebraska", year = 2024)
find_team_id(team = "UCLA", year = 2023, sport = "MVB")
```

find\_team\_name

# Description

This is a convenience function to find NCAA team names in ncaa\_teams. Once the proper team name is found, it can be passed to find\_team\_id() or group\_stats().

#### Usage

```
find_team_name(pattern = NULL)
```

### Arguments

pattern Character string of pattern you want to find in the vector of team names.

# Value

Returns a character vector of team names that include the submitted pattern.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

# See Also

```
Other search functions: find_team_id()
```

#### Examples

```
find_team_name(pattern = "Neb")
```

get\_teams

Extract data frame of team names, IDs, conference, division, and season

#### Description

NCAA datasets use a unique ID for each sport, team, and season. This function extracts team names, IDs, and conferences for each NCAA team in a division. However, you should not need to use this function for volleyball data from 2020-2024, as it has been used to generate wvb\_teams and mvb\_teams. However, it is available to use for other sports, using the appropriate three letter sport code drawn from ncaa\_sports (e.g., men's baseball is "MBA").

#### group\_stats

#### Usage

get\_teams(year = NULL, division = 1, sport = "WVB")

# Arguments

year	Single numeric year for fall of desired season.
division	NCAA division (must be 1, 2, or 3).
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).

# Value

Returns a data frame of all teams, their team ID, division, conference, and season.

# Note

This function **requires internet connectivity** as it checks the NCAA website for information. This function is a modification of the ncaa\_teams() function from the {baseballr} package.

group\_stats

Aggregate player statistics and play-by-play information

# Description

This function aggregates player statistics and play-by-play information within a season by applying player\_season\_stats(), player\_match\_stats(), or match\_pbp() across groups of teams (for player\_season\_stats()) or across contests within a season (for player\_match\_stats() and match\_pbp()). For season stats, it aggregates all player data and team data into separate data frames and combines them into a list. For instance, if you want to extract the data from the teams in the women's 2024 Final Four, pass a vector of c("Louisville", "Nebraska", "Penn State", "Pittsburgh") to the function. For match or play-by-play data for a team, pass a single team name and year. Team names can be found in ncaa\_teams or by using find\_team\_name().

#### Usage

```
group_stats(
   teams = NULL,
   year = NULL,
   level = "season",
   unique = TRUE,
   sport = "WVB"
)
```

#### Arguments

teams	Character vector of team names to aggregate.
year	Numeric vector of years for fall of desired seasons.
level	Character string defining whether to aggregate "season", "match", or play-by-play ("pbp") data.
unique	Logical indicating whether to only process unique contests (TRUE) or whether to process duplicated contests (FALSE). Default is TRUE.
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).

## Value

For season level, returns list with data frames of player statistics and team statistics. For match and pbp levels, returns data frame of player statistics and play-by-play information respectively.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

#### See Also

Other functions that aggregate statistics: conference\_stats(), division\_stats()

#### Examples

```
group_stats(teams = c("Louisville", "Nebraska", "Penn St.", "Pittsburgh"),
year = 2024, level = "season")
```

match\_pbp

Extract play-by-play information for a particular match

# Description

The NCAA's page for a match/contest includes a tab called "Play By Play". This function extracts the tables of play-by-play information for each set.

# Usage

```
match_pbp(contest = NULL)
```

#### Arguments

contest Contest ID determined by NCAA for match. To find ID, use find\_team\_contests() for a team and season.

#### mvb\_teams

# Value

Returns a data frame of set number, teams, score, event, and player responsible for the event.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

#### Examples

match\_pbp(contest = "6080706")

mvb\_teams

NCAA Men's Volleyball Teams 2020-2024

### Description

This data frame includes all men's NCAA Division 1 and 3 teams from 2020-2024.

#### Usage

mvb\_teams

# Format

A data frame with 873 rows and 6 columns:

team\_id Team ID for season/year

team\_name Team name

conference\_id Conference ID

conference Conference name

div NCAA division number (1 or 3)

yr Year for fall of season

#### Source

https://stats.ncaa.org

#### See Also

Other data sets: ncaa\_conferences, ncaa\_sports, ncaa\_teams, wvb\_teams

# Examples

head(mvb\_teams)

ncaa\_conferences NCAA Conference Names

# Description

This vector includes names for all NCAA volleyball conferences.

# Usage

ncaa\_conferences

#### Format

A character vector with 111 conference names.

# Source

https://stats.ncaa.org

# See Also

Other data sets: mvb\_teams, ncaa\_sports, ncaa\_teams, wvb\_teams

#### Examples

head(ncaa\_conferences)

ncaa\_sports

NCAA Sports and Sport Codes

# Description

This data frame includes all NCAA women's and men's sports and the codes used to refer to the sports.

#### Usage

ncaa\_sports

# Format

A data frame with 100 rows and 2 columns:

code Sport code

sport Sport name

# ncaa\_teams

#### Source

https://ncaaorg.s3.amazonaws.com/championships/resources/common/NCAA\_SportCodes.
pdf

# See Also

Other data sets: mvb\_teams, ncaa\_conferences, ncaa\_teams, wvb\_teams

# Examples

head(ncaa\_sports)

ncaa\_teams

#### NCAA Team Names

# Description

This vector includes names for all NCAA volleyball teams.

#### Usage

ncaa\_teams

# Format

A character vector with 1,089 team names.

#### Source

https://stats.ncaa.org

#### See Also

Other data sets: mvb\_teams, ncaa\_conferences, ncaa\_sports, wvb\_teams

# Examples

head(ncaa\_teams)

player\_match\_stats Extract player statistics for a particular match

#### Description

The NCAA's page for a match/contest includes a tab called "Individual Statistics". This function extracts the tables of player match statistics for both home and away teams, as well as team statistics (though these can be omitted). If a particular team is specified, only that team's statistics will be returned.

#### Usage

```
player_match_stats(
   contest = NULL,
   team = NULL,
   team_stats = TRUE,
   sport = "WVB"
)
```

#### Arguments

contest	Contest ID determined by NCAA for match. To find ID, use find_team_contests() for a team and season.
team	Name of school. Must match name used by NCAA. Find exact team name with find_team_name().
team_stats	Logical indicating whether to include (TRUE) or exclude (FALSE) team statis- tics. Default includes team statistics with player statistics.
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).

# Value

By default, returns data frame that includes both home and away team match statistics. If team is specified, only that team's data are returned.

# Note

This function requires internet connectivity as it checks the NCAA website for information.

#### See Also

Other functions that extract player statistics: player\_season\_stats()

# Examples

player\_match\_stats(contest = "6080706")

player\_season\_stats Extract player statistics from a particular team and season

#### Description

The NCAA's main page for a team includes a tab called "Team Statistics". This function extracts the table of player statistics for the season, as well as team and opponent statistics (though these can be omitted).

#### Usage

```
player_season_stats(team_id, team_stats = TRUE)
```

#### Arguments

team_id	Team ID determined by NCAA for season. To find ID, use find_team_id().
team_stats	Logical indicating whether to include (TRUE) or exclude (FALSE) team statistics. Default includes team statistics with player statistics.

# Value

Returns a data frame of player statistics. Note that hometown and high school were added in 2024.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

### See Also

Other functions that extract player statistics: player\_match\_stats()

#### Examples

```
player_season_stats(team_id = "585290")
```

team\_match\_stats Extract team summary statistics for all matches in a particular season

#### Description

The NCAA's main page for a team includes a tab called "Game By Game" and a section called "Game by Game Stats". This function extracts the team's summary statistics for each match of the season.

#### Usage

team\_match\_stats(team\_id = NULL, sport = "WVB")

#### Arguments

team_id	Team ID determined by NCAA for season. To find ID, use find_team_id().
sport	Three letter abbreviation for NCAA sport (must be upper case; for example
	"WVB" for women's volleyball and "MVB" for men's volleyball).

#### Value

Returns a data frame of summary team statistics for each match of the season.

#### Note

This function **requires internet connectivity** as it checks the NCAA website for information. It also uses the {chromote} package and **requires Google Chrome** to be installed.

#### See Also

Other functions that extract team statistics: team\_season\_info(), team\_season\_stats()

# Examples

```
team_match_stats(team_id = "585290")
```

<pre>team_season_info</pre>	Extract arena, coach, record, and schedule information for a particu-
	lar team and season

#### Description

The NCAA's main page for a team includes a tab called "Schedule/Results". This function extracts information about the team's venue, coach, and records, as well as the table of the schedule and results. This returns a list, so you can subset specific components with \$ (e.g., for coach information from an object called output, use output\$coach).

#### Usage

```
team_season_info(team_id = NULL)
```

# Arguments

team\_id Team ID determined by NCAA for season. To find ID, use find\_team\_id().

# Value

Returns a list that includes arena, coach, schedule, and record information.

#### Note

This function requires internet connectivity as it checks the NCAA website for information.

#### See Also

Other functions that extract team statistics: team\_match\_stats(), team\_season\_stats()

#### Examples

```
team_season_info(team_id = "585290")
```

team\_season\_stats Extract teams statistics for season statistics from 2020-2024

# Description

The NCAA's main page for a team includes a tab called "Game By Game" and a section called "Career Totals". This function extracts season summary stats.

# Usage

```
team_season_stats(team = NULL, opponent = FALSE, sport = "WVB")
```

#### Arguments

team	Name of school. Must match name used by NCAA. Find exact team name with find_team_name().
opponent	Logical indicating whether to include team's stats (FALSE) or opponent's stats (TRUE). Default is set to FALSE, returning team stats.
sport	Three letter abbreviation for NCAA sport (must be upper case; for example "WVB" for women's volleyball and "MVB" for men's volleyball).

#### Value

Returns a data frame of summary team statistics for each season.

#### Note

This function **requires internet connectivity** as it checks the NCAA website for information. Due to changes in the NCAA website, statistics from before 2020 are no longer available.

#### See Also

Other functions that extract team statistics: team\_match\_stats(), team\_season\_info()

# Examples

```
team_season_stats(team = "Nebraska")
```

wvb\_teams

NCAA Women's Volleyball Teams 2020-2024

# Description

This data frame includes all women's NCAA Division 1, 2, and 3 teams from 2020-2024.

#### Usage

wvb\_teams

# Format

A data frame with 5,289 rows and 6 columns:

team\_id Team ID for season/year

team\_name Team name

conference\_id Conference ID

**conference** Conference name

div NCAA division number (1, 2, or 3)

yr Year for fall of season

# Source

https://stats.ncaa.org

# See Also

Other data sets: mvb\_teams, ncaa\_conferences, ncaa\_sports, ncaa\_teams

# Examples

head(wvb\_teams)

16

# Index

\* data sets mvb\_teams, 9 ncaa\_conferences, 10 ncaa\_sports, 10 ncaa\_teams, 11 wvb\_teams, 16 \* datasets mvb\_teams, 9 ncaa\_conferences, 10 ncaa\_sports, 10 ncaa\_teams, 11 wvb\_teams, 16 \* functions that aggregate statistics conference\_stats, 2 division\_stats, 3 group\_stats, 7 \* functions that extract player statistics player\_match\_stats, 12 player\_season\_stats, 13 \* functions that extract team statistics team\_match\_stats, 13 team\_season\_info, 14 team\_season\_stats, 15 \* search functions find\_team\_id, 5 find\_team\_name, 6 conference\_stats, 2, 4, 8 division\_stats, 3, 3, 8 find\_team\_contests, 4 find\_team\_contests(), 8, 12 find\_team\_id, 5, 6 find\_team\_id(), 4, 6, 13, 14 find\_team\_name, 5, 6 find\_team\_name(), 5, 7, 12, 15 get\_teams, 6 group\_stats, *3*, *4*, 7

group\_stats(), 2, 3, 6
match\_pbp, 8
match\_pbp(), 7
mvb\_teams, 5, 6, 9, 10, 11, 16
ncaa\_conferences, 2, 9, 10, 11, 16
ncaa\_sports, 6, 9, 10, 10, 11, 16
ncaa\_teams, 5-7, 9-11, 11, 16
player\_match\_stats, 12, 13
player\_match\_stats(), 7
player\_season\_stats, 12, 13
player\_season\_stats, 13, 15
team\_match\_stats, 13, 15
team\_season\_info, 14, 14, 15
team\_season\_stats, 14, 15, 15
wvb\_teams, 5, 6, 9-11, 16