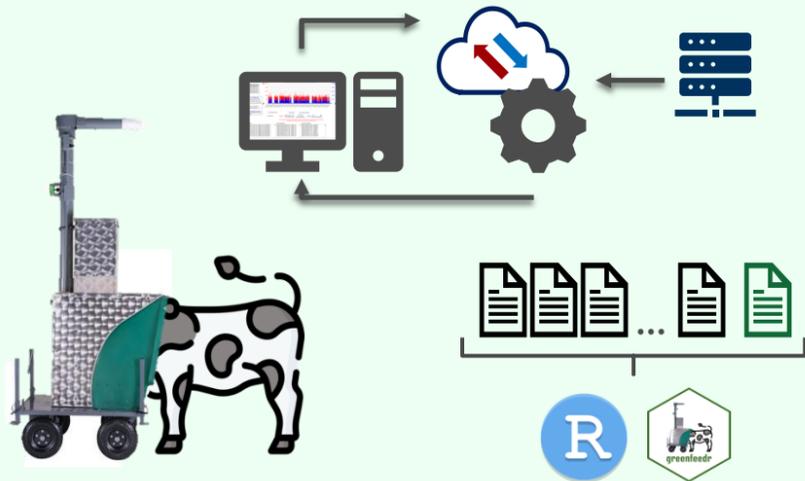


# Data processing with greenfeedr :: CHEAT SHEET



## Basics

**greenfeedr** provides a set of functions that help you to download, report, and process GreenFeed data



The main functions are:

**get\_gfdata()** downloads GreenFeed data via API

**report\_gfdata()** generates reports of GreenFeed data

**compare\_gfdata()** generates reports of GreenFeed data

**process\_gfdata()** processes and averages GreenFeed data

**pellin()** processes pellet intakes from GreenFeed system

**viseat()** processes GreenFeed visits

## Installation

You can install the released version 1.2.0 of greenfeedr from CRAN with:

```
install.packages("greenfeedr")
library(greenfeedr)
```

## Downloading data

The function could be used for downloading preliminary GreenFeed data and raw data (feedtimes, rfids, and cmds).

```
get_gfdata(user = <USERNAME>, pass = <PASSWORD>, d = <DATA_TYPE>, exp = <NAME>, unit = <FID>, start_date = <DD/MM/YY>,
end_date = <DD/MM/YY>, save_dir = </DIR/>)
```

## Processing data

```
process_gfdata(data = <DATA>, start_date = <DD/MM/YY>,
end_date = <DD/MM/YY>, param1 = <records>,
param2 = <days>, min_time = <2>, cutoff = 3)
```

There are 3 parameters that are required for data processing and that will have a high impact on the total number of records:

- **param1** is the number of records per day.
- **param2** is the number of days with records per week.
- **min\_time** is the duration of a gas record (C-Lock used 2 minutes)

To evaluate parameters that best fit your GreenFeed data, use **eval\_gfparam(data, start\_date, end\_date)**.

## Extra functions

```
pellin(user = <USERNAME>, pass = <PASSWORD>, unit = <FID>,
gcup = <34>, start_date = <DD/MM/YY>, end_date =
<DD/MM/YY>, save_dir = </DIR>, rfid_file = </FILE_PATH>,
file_path = </FEEDTIMES>)
```

```
viseat(user = <USERNAME>, pass = <PASSWORD>, unit = <FID>,
start_date = <DD/MM/YY>, end_date = <DD/MM/YY>,
rfid_file = </FILE_PATH>, file_path = </FEEDTIMES>)
```

## Reporting data

Complete the template below to generate a PDF report:

```
report_gfdata(input_type = <PRELIM|FINAL>, exp = <NAME>,
unit = <FID>, start_date = <DD/MM/YY>,
end_date = <DD/MM/YY>, save_dir = </DIR/>,
plot_opt = <ALL|CH4|CO2|O2|H2>,
rfid_file = </FILE_PATH|DATA>, user = <USERNAME>,
pass = <PASSWORD>, file_path = <FINAL_REPORT>)
```



Two reports could be created by **process\_gfdata()**:

- Daily GreenFeed Report
- Final GreenFeed Report

