Reproducible Documents with {rmarkdown}
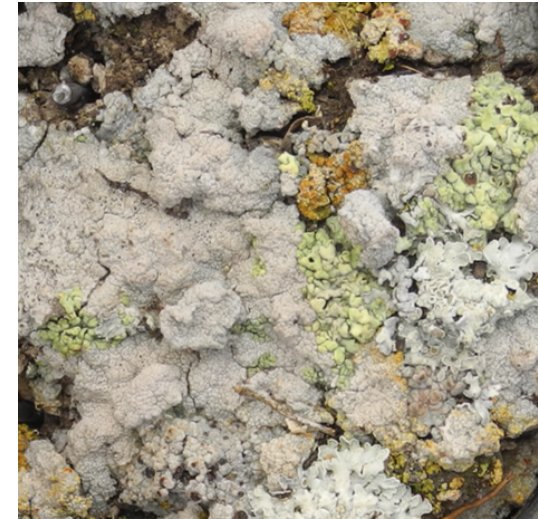
Instructor: Selina Baldauf

Freie Universität Berlin - Theoretical Ecology

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Who am I?

- Scientific modeller with ecology background

- Working in the theoretical ecology group at Freie Universität

- PhD student at Freie Universität Berlin

  - Topic: Modelling the impact of biological soil crusts on dryland hydrology

Teaching R

- Statistics with R for Biology Master students
- Workshops on R packages, R development, …

The Workshop: Topics

- Day 1: Introduction to the {rmarkdown} package
  - What is it?
  - What can you do with it?
  - Basic functionality
  - **Day 2: More advanced features and other document types**
  - Citations
  - HTML output
  - Word output
  - Format tables
  - Additonal things if time
  - **Day 3: Bring your own data**

The Workshop: Schedule and Organization

🕐 1 p.m. - 5 p.m. (🥪 ~ 12 a.m. - 1 p.m.)
📍 We will meet in the `General` meeting on Webex

Organization

- Input sessions

  - Presentation and demonstration of a topic
  - Some examples

- **Tasks** regarding this topic

  - Solve them in small groups

- **Joint discussion** of tasks and additional questions

The Workshop: Material

- All material can be found on the workshop's website

    - Presentations
    - Tasks
    - Solutions
    - Additional resources

- The complete material can be downloaded from the website after the workshop

Bring your own data

Learning by doing

- Work on your own research data

  - I will also provide some real life data sets from different topics

- Create your own documents

  - Use methods learned in the course
  - Try something new
  - Create the document that you actually need or want to learn

- Think about it and let me know tomorrow afternoon if you want to participate

- If you want to try something specific: Let me know and I can check for resources etc. before

Before we get started I

Any feedback and questions are very welcome.

I am curious to know

- What you liked/disliked
- Which topics or methods you missed
- Which tasks were too easy/too difficult or just right
- ...

Before we get started II

Did anyone have problems installing the package or R and R Studio?