

sDiv working group meeting report

"sUnderfoot 3"

Working group meeting report

The third workshop of the sUnderfoot working group took place from 10th to 14th June 2024. Definitely, in person meetings are much more productive, as we realized after our first online and second in person meeting. In the sUnderfoot 3, 15 people could attend in person from Brazil, USA, Germany, France, Czech Republic, and South Africa. The group was much more focused on the tasks we had to finish for this last meeting, as well as integrated. We kept the format from last time, starting the day with the Vision of the Day, short presentations, breakout groups, vivid discussions and great art (both with drawings as well as poems). As the last time, each one of us brought something from their own country, which turned our days sweeter and more pleasant. Finally, we had a nice private tour through Leipzig and very nice dinner and game time together.

For this last meeting we had important tasks we wanted to:

- 1) finalize the Database, which we called **UNDERground PLant Organ Trait** database - **UNDERPLOT**
- 2) finalize the conceptual paper, which we have started to discuss in the first online meeting and advanced a lot during the second in person meeting
- 3) finalize the Belowground Persistence Index paper, which arose from sUnderfoot 2
- 4) continue discussions for the environmental paper, which began during sUnderfoot 2
- 5) start discussions about the productivity paper, led by Karl Andraczek (iDiv PosDoc)
- 6) discuss about new possibilities of funding new future meetings, since the group is very productive and wishes to keep working together

During the first day, there were presentations of the papers that are more advanced, such as the database and BPI-paper. We also had presentations of results and developments of the past months of the conceptual and environmental paper. Finally, we set the goals for the meeting and the group split into breakout-groups focusing on finishing tasks related to the goals set. We were quite excited to know that the database is nearly ready and could fix all problems found with the dataset. Also, the BPI-paper was nearly finished, needing a last review to be submitted. It was clear for us that the BPI-paper needs to be submitted first, since we use this classification in our datapaper as well. The datapaper will be led by Helge Bruelheide, while the BPI-paper is led by Jitka Klimesova. All participants of the sUnderfoot are contributing for both papers.

The sUnderfoot participants focused on finishing tasks and advancing with the papers that still needed discussion and analyses. Therefore, splitting the group into breakout groups focussing on each paper was the best solution. Since each one of us have different skills and expertises concerning the different belowground realms, we tried to have groups that would be meaningful for each paper.

Everytime the groups thought it was necessary to discuss a particular issue, or to show the new analyses to the entire group, they would call a group meeting and everyone would discuss it. This strategy turned out to be very effective, leaving the groups more flexibility and independence. By the end of the day, the groups would meet again and discuss their progress with the entire sUnderfoot team, explaining the analysis, asking for new data or ideas, and also exposing all problems and conflicts it would come up with during their discussions.

We progressed a lot with all the tasks we had at the beginning of the sUnderfoot 3. We had great progress with the conceptual paper: analyses were carried out, results and concepts were discussed and the core group began to write the paper during the meeting. The BPI-paper was reviewed by Jitka Klimesova and Alessandra Fidelis during the meeting and was nearly ready for the last review round among the other sUnderfoot participants. Database UNDERPLOT was also nearly ready and the datapaper was starting to gain shape, led by Helge Bruelheide. We have decided that we will use fire as the environmental driver to analyze trait distribution for the environmental paper. We defined variables, we ran the first analyses during the workshop and started to write the scientific questions and hypotheses for the paper.

Finally, on the last day of the workshop we used part of the time to discuss future collaborations. We believe that the group worked so well together and that we still have so much to discuss about the topic, that we are willing to look for new funding possibilities to either run future workshops or even projects together, exploring more this exciting topic.

Altogether, the third and last workshop was joyful and a great success with very vivid and exciting discussions and plans for future collaborations. It is incredible how fast our three workshops flew by. One of the highlights of this week was the Vision of the Day gave by Shersingh Joseph Tumber-Dávilla: he inspired us by writing a poem about the underground world that can be found in [this blog post](#) as well.

The sUnderfoot Team

