# 21<sup>st</sup> Newsletter of the UFZ Green Roof Research



February 04, 2025



# Research green roof at the Helmholtz Centre for Environmental Research - UFZ







Research partners:







#### Practice partners:







#### 5<sup>th</sup> Leipzig Green Roof College

The opening event of the 5<sup>th</sup> Leipzig Green Roof College (formerly Leipzig Green Roof Academy) took place on October 22 and 23, 2024. Fourteen students and trainees from five federal states and seven educational institutions were trained on the subject of greening buildings. Experts from the Federal Association for Green Buildings BuGG e.V., the Federal Agency for Nature Conservation, the Anhalt University of Applied Sciences, the ThINK company and the UFZ taught the students the structure and essential functions of green roofs.



Participants and organizers of the Leipzig Green Roof College at the end of the event in the Botanical Garden of the University of Leipzig (Photo: Katy Bernhard, UFZ)

Afterwards, as part of an excursion to green roofs in Leipzig, representatives from the companies ZinCo, Optigrün and Leipziger Wasserwerke presented examples of practical implementation.

As the green roof course continued, the students and trainees were given the task of developing a concept for the redesign of the green roof complex at the MDR headquarters in Leipzig. After a feedback session in which the newly qualified project developers were able to exchange ideas with experts from research and practice, concepts were submitted by all four groups.

#### 1<sup>st</sup> Central German Green Roof Day

At the invitation of the Office for Environmental Protection of the City of Leipzig, the 1<sup>st</sup> Central German Green Roof Day took place on January 24, 2025 in cooperation with the UFZ, MDR and the members of the Green Roof Think Tank. The event in the Alte Handelsbörse in Leipzig offered a platform for exchange and networking between practitioners and researchers in the Central Germany region. More than 50 people from Saxony, Saxony-Anhalt and Thuringia accepted the invitation and found out about the new trends in building greening. As part of the Green Roof Day, the designs of the 5<sup>th</sup> Leipzig Green Roof College were also presented, evaluated by a jury and awarded prizes. As prizes, the students and trainees received an excursion to Gondwanaland - the largest green roof in Leipzig - as well as certificates, prize money and gifts in kind from the MDR.



Award ceremony of the 5<sup>th</sup> Leipzig Green Roof College as part of the 1<sup>st</sup> Central German Green Roof Day (Photo: André Künzelmann, UFZ)



The first prize got a team of students Vincent Munzer (MLU Halle-Wittenberg), Abd Hmedeh, Nick Stollberg (HTWK Leipzig) and John Simmonds (FH Erfurt), whose concept was extremely convincing. The group submitted a thoroughly realistic, tangible and very professionally developed concept. The concept also impresses with its functionality and innovative design. The high retention potential was the decisive factor in awarding first place to this concept. The client estimates that the acceptance of this concept among the workforce is very high. The existing elements were very cleverly integrated into the new facility. The focus was on sustainability and quality of life and thus follows the principles of the company. The jury's conclusion: the concept can be implemented in its entirety in the form shown, but also in some aspects.



Second place went to Ningning Wang (TU Munich), Frederik Nochta (TU Berlin) and Lukas Weiler (GaLaBau Schilling). The submitted documents were judged to be technically professional and visually very appealing. The jury was of the opinion that the group had submitted a very visionary concept with very high quality. The idea of installing a marsh plant roof on the roof, which can also be used for research, is seen as a special unique selling point. However, this implementation would be very expensive. One positive aspect is that the costs for maintenance and care were included. The effort and care seem very intensive in this design. A lot of calculations were carried out as part of the conception, which is very commendable. The design is characterized by the highest evaporation rate. All in all, a very sophisticated, marketable and particularly successful concept.



Third place went to Maria Frohberg (HTWK Leipzig), Cosima Paul (HTW Dresden) and Tom Mahler (GaLaBau Schilling). A special feature of the group's concept is a roof that could be used by MDR employees. Particularly noteworthy are the picnic area and the lounge at the top, which can be reached via a pretty spiral staircase. Both the idea and the suggestions for implementation are very professional. The outline is very impressive from an artistic point of view. Many aspects are presented here in detail, including plant lists. The suggestion to provide the inner courtyard with floating islands was judged to be bold and innovative. Creating a roof terrace seems like a good idea. The jury discussed a lot about how the employees would actually use this area if it were implemented, but in the end there was no consensus. The visualization of the idea is also appealing. There are still challenges here with regard to economic aspects.



The second third place went to Anna-Lena Fiedler (Bauhaus University Weimar), Leo Naumann (GaLaBau Schilling), Johanna A.H. F. Westermann (MLU Halle-Wittenberg) and Niklas Zaydler (HTWK Leipzig). In this design, the positive aspects of green roofs on personal well-being were addressed. One focus of the planning was the inner courtyard. Unfortunately, the water balance is the worst of all the submitted designs. However, the concept appears to be very effective because it is easy to implement. It is a very cost-effective concept. This concept received high points for the areas of investment costs and maintenance effort, which are the lowest in comparison to the other concepts.

The jury decided to give this concept 3<sup>rd</sup> place because it had the same number of points as the concept in the group of Maria, Cosima, and Tom.

We would like to thank the practical partners (ZinCo, Optigrün and ThINK, Leipziger Wasserwerke) for their active support of the students during the creation of their designs and their contribution in the form of prize money.

We would also like to thank the Environmental Information Center for donating the excursion to Gondwanaland for the students and the members of the Leipzig Green Roof Think Tank. Our acknowledgements also go to the UFZ WT Fund for the financial contribution and the Friends and Supporters of the UFZ e.V. association for their uncomplicated support in transferring the prize money to the winners. A big thank you also goes to the Office for Environmental Protection of the City of Leipzig, the Central German Broadcasting Corporation, the Botanical Garden and all partners for the pleasant cooperation during the organization of the 5<sup>th</sup> Leipzig Green Roof College and the 1<sup>st</sup> Central German Green Roof Day.

Special thanks, of course, go to the students and trainees who, in their free time and despite the great distances between the group members, created such highly motivated concepts together.

