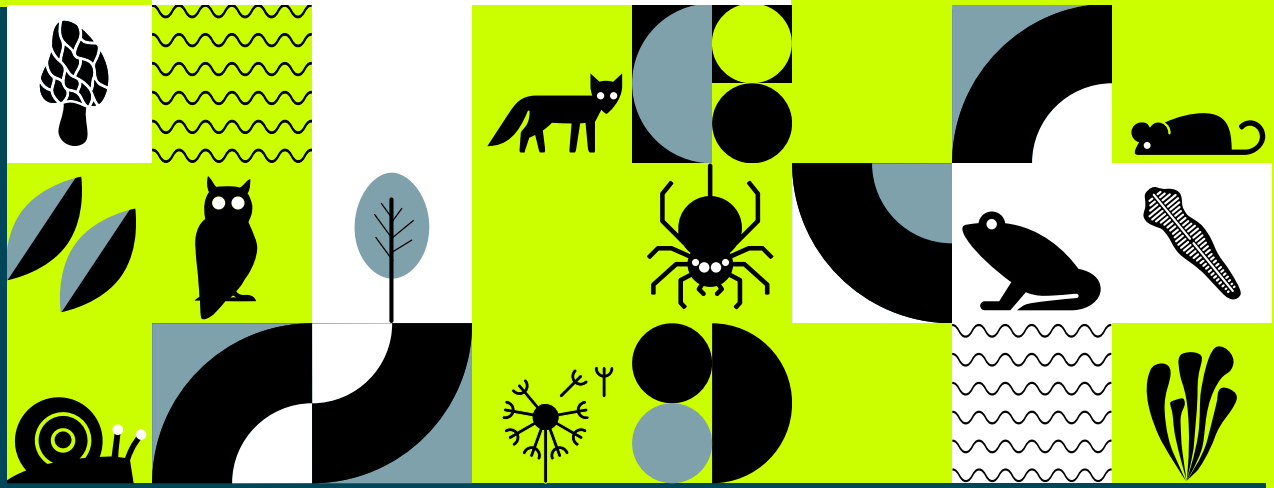
FREIE UNIVERSITÄT BERLIN

Biodiversity Strategy



Freie Universität Berlin

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1. Preambel

The biodiversity crisis calls for action. The following Biodiversity Strategy expands on Freie Universität Berlin's Sustainability Strategy to include the protection and promotion of nature and biodiversity on campus. To this end, the university is combining biodiversity as an object of scientific study with nature conservation research and the approaches it takes to planning and managing its own green spaces, water bodies, and buildings. At the same time, the strategy aims to better interlink the various activities being carried out across the university regarding nature and biodiversity, research and teaching, and volunteer work. It also serves to make these different areas more visible. Another key building block is the promotion of inter- and transdisciplinary teaching and educational programs.

The Biodiversity Strategy represents the next logical step in the university's efforts to address the climate crisis, following upon the Sustainability Mission Statement of Freie Universität Berlin – adopted in 2016 – and the climate emergency declared by the university in 2019. In addition, the strategy establishes a structured link between biodiversity, climate protection, and health concerns. Furthermore, it also represents the university's contribution to attaining and complying with

- Goals 14 "Life under Water" and 15 "Life on Land" of the UN Sustainable Development Goals (SDGs)
- the objectives set by the UN Convention on Biodiversity
- the Kunming-Montreal Global Biodiversity Framework
- the Berlin Urban Nature Pact
- the Global Strategy for Plant Conservation (GSPC)
- the EU Regulation on Invasive Species
- the EU Soil Strategy for 2030
- the German Federal Nature Conservation Act (BNatSchG)
- the Berlin Strategy for Biodiversity Preservation, and
- regular validation of Freie Universität's environmental management in accordance with the European EMAS (Eco-Management and Audit Scheme) seal of approval.

The cornerstone of the Biodiversity Strategy is the unique role biodiversity research plays across multiple disciplines at Freie Universität. Eight percent of the 1,500 research projects currently being undertaken at Freie Universität address the SDG "Life on Land" (last updated 2023). As such, the strategy offers a systematic roadmap for building on existing expertise in biodiversity research and collaborating with partner universities and non-university research institutions.

A main focus of the strategy is promoting the diversity of fauna, flora, and microorganisms, as well as protecting ecosystem functions and processes.

S. Lokatis: Red mason bee on an apple blossom, family of squirrels, female alpine newt

S. Lokatis: Blooming campus at the Henry Ford Building

2. Areas of Activity

Freie Universität Berlin will establish a working group for nature and biodiversity that is tasked with

- improving the visibility of and links between existing research activities and teaching in the area of activity “biodiversity and nature conservation”
- promoting networking among other stakeholders connected to the university – in the district, in the region, as part of the Berlin University Alliance, and in international university networks such as Una Europa and Nature Positive Universities
- establishing an internal and an external communication strategy regarding biodiversity
- promoting opportunities for inter- and transdisciplinary teaching and education
- ensuring that the results of research on how biodiversity is developing on Freie Universität campus are communicated to a wider audience.

The university will systematically integrate aspects of biodiversity into its plans when organizing construction work and redesigning areas on campus. By developing near-natural habitats and introducing select measures, the university will be promoting biological diversity that is appropriate to local conditions. At the same time, habitats, natural resources, health protection measures, and climate protection measures will be viewed holistically. To increase the effectiveness of these activities, Freie Universität will be communicating them internally. It will also seek out collaborations with local and municipal partners.

Before implementing any wide-ranging measures based on this Biodiversity Strategy, Freie Universität commits to surveying the situation first – i.e., defining groups of target organisms and gathering information on the existing types of land use and vegetation. This will be the initial basis for establishing measures aimed at reducing biodiversity loss. Following this, biodiversity will be enhanced by optimizing or creating habitats, or by increasing the availability of resources for various organisms. A system for monitoring the effectiveness of these measures will be introduced for evaluation purposes and to ensure that these measures can continually be adapted.
The following principles guide this process:

2.1 Research and Transformative Teaching – Researching and Teaching Biodiversity and Sustainability

Freie Universität actively supports interdisciplinary research and teaching in the context of biodiversity and integrating the university campus itself into research and teaching activities. Instructors and researchers are encouraged to build upon the successful research activities that have already been carried out across all Freie Universität departments and the Botanic Garden and Botanical Museum Berlin on the subject of biodiversity. This includes close collaborations with external partner organizations, for example, the new research building dedicated to biodiversity research in Dahlem, funded by the Leibniz Institute of Freshwater Ecology and Inland Fisheries and Freie Universität, as well as the Berlin Center for Genomics in Biodiversity Research (BeGenDiv), a collaboration between the University of Potsdam, Freie Universität, and the Leibniz Association, among others. These and other activities shall be actively pursued and expanded, both on a national and international level.

The scientific results achieved within the scope of these activities shall be integrated into research-oriented teaching at Freie Universität, providing the opportunity to use both the university and its campus as a “living lab.” Monitoring the success of these activities shall also be integrated into teaching activities. This approach provides students with opportunities to learn about evaluation methods and put them into practice. Freie Universität is combining the issue of biodiversity with its obligations surrounding sustainable development in education, teaching, research, and campus management. This includes taking education into account as a significant aspect of sustainable development.

BO Berlin: Seedbank Dahlem

K. Braun-Wanke: Workshops Schüler:innen Uni Nachhaltigkeit + Klimaschutz

K. Borchers: Kestrel nest box

2.2 Construction and Landscape Planning

Construction and renovation work should not disturb or harm existing biodiversity. Any such adverse effects are to be kept to a minimum. Where possible, new habitats must be created. If it is impossible to avoid disturbing or harming biodiversity due to construction work or land use changes, the negative impact is to be compensated through measures that have been scientifically proven to be at least equivalent in terms of the benefits they provide for biodiversity and ecosystem functioning. Particular importance is to be given to protecting undisturbed ground and bodies of water, as these are highly significant for the microclimate.

When designing buildings, it is fundamental that the sustainable use of rainwater and drinking water are integrated into the plans. Measures for redesigning areas in line with the “sponge city” concept in order to promote low-nutrient, high-diversity habitats will be encouraged, and light pollution reduced as much as possible so as to protect nocturnal wildlife.

2.3 Green Areas and Their Maintenance

The publicly accessible green spaces on campus, comprising approximately 34 hectares in total, shall be developed and maintained so as to promote the creation of species-rich natural urban habitats. Near-natural areas that are home to native, site-appropriate species, require little to no irrigation and provide habitats for a wide range of species due to their unique and varied characteristics. Maintenance of these areas should take into consideration the phenology [1] of the species that need to be encouraged in each area. Any maintenance work should take place in accordance with the principles of natural landscape maintenance and have the overarching goal of avoiding or reducing nutrient enrichment or increased levels of harmful substances in these areas.

The Botanic Garden with its 44 hectares of land is not only home to an exceptional scientific collection of living plants from across Germany, Europe, and the world, it is also a long-standing habitat for spontaneous species of flora and fauna. It has developed and adopted a garden maintenance agreement together with Berlin's Office for Historic Garden Facilities (Gartendenkmalamt) that takes into consideration the special needs of the collection while also respecting the importance of nature and biodiversity conservation.

S. Lokatis: Mullein as winter habitat, Hedgehog tunnel, deadwood in the meadow, Weevils in the foliage

[1] Phenology is the study of plant and animal life cycles as driven by changes in weather and climate

S. Heilmann: UniGardening

2.4 Participation, Cooperation, and Communication

All members of the university are invited to play a part in implementing the Biodiversity Strategy, as well as in developing it further. Hands-on events and activities will be offered in the immediate vicinity of workspaces and study spaces to encourage participation. These will be aimed at keeping green areas as natural as possible and/or for cultivating plants (e.g., fruits and vegetables). The creation of Naturerfahrungsräume (natural urban spaces encouraging members of the public to experience nature) will be actively promoted. These spaces will offer opportunities for learning and recreation, as well as provide visitors with information about biodiversity, ecological interdependencies, and ongoing measures to promote biodiversity.

In cooperation with local institutions and neighbors such as the Max Planck Society or the District Office of Steglitz-Zehlendorf, green corridors are to be created to link habitats across Dahlem.

The Botanic Garden, with approximately 300,000 visitors per year, is an important gateway to Berlin's urban community. Together with Freie Universität, the institutions shall pair implementation of the Biodiversity Strategy with planned-out public relations work in order to raise awareness of the significance of biodiverse urban nature on campus, in Berlin, and elsewhere.

S. Lokatis: Building the butterfly spiral in the Blätterlaube community garden

3. Implementation and Outlook

This Biodiversity Strategy will be further refined and implemented using specific guidelines. These will be evaluated and, where necessary, modified every two years. It is expected that aspects that have an indirect influence on biodiversity (food, indoor plants, consumable resources) will also play a role in future biodiversity measures. The guidelines will be taken into consideration in any relevant procurement processes.

In addition, the university commits to creating specific action plans for implementing its strategic goals on campus. Further, it commits to systematically reevaluate these plans regularly and to adapt them to reflect the state of the art in research and practice. In doing so, and by participating in the European environmental management system EMAS, Freie Universität Berlin ensures that it will continually improve the processes it introduces as part of the Biodiversity Strategy.

S. Lokatis: Butterfly monitoring Cabbage whiting

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