



# COHABITATION FOR CLIMATE RESILIENCE

LEIBNIZ UNIVERSITY HANOVER

Country /City **GERMANY / HANOVER**

University / School **GOTTFRIED WILHELM LEIBNIZ UNIVERSITY HANOVER**

Academic year **5**

Title of the project **MATERIAL AND CLIMATE: TENSION BETWEEN CLIMATE ADAPTED SURFACE DESIGN AND URBANISTIC CHARACTERISTICS ON THE BASIS OF SIX CITY SQUARES IN BRUNSWICK.**

Authors **LUCA WILLENBROCK**



## TECHNICAL DOSSIER

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|---|---|
| Title of the project                        | <b>MATERIAL AND CLIMATE: TENSION BETWEEN CLIMATE ADAPTED SURFACE DESIGN AND URBANISTIC CHARACTERISTICS ON THE BASIS OF SIX CITY SQUARES IN BRUNSWICK.</b> |
| Authors                                     | <b>LUCA WILLENBROCK</b>   |
| Title of the course                         | <b>MASTER THESIS</b>  |
| Academic year                               | <b>5</b>  |
| Teaching Staff                              | <b>PROF. DIPL.-ING. KATJA BENFER, M.SC. JONAS SCHÄFER</b>   |
| Department / Section / Program of belonging | <b>FACULTY FOR ARCHITECTURE AND LANDSCAPE.<br/>INSTITUTE FOR LANDSCAPE ARCHITECTURE</b>   |
| University / School                         | <b>GOTTFRIED WILHELM LEIBNIZ UNIVERSITY HANOVER</b>   |



**This thesis builds on the fact that urban climates, in contrast to rural areas, are influenced by a greater extent of sealed surfaces, slower wind speeds and low air exchange combined with relatively low percentage of green areas. In consequence, cities tend to heat up, and people, plants and other species suffer from heat stress and longer periods of droughts.**

**The thesis addressed these issues by research through design in the city of Brunswick in Northern Germany. Six squares in the center of the city were chosen, which are all sealed and already affected by high to extreme thermal load. According to the city of Brunswick's climate analysis, the thermal situation in the city center will even intensify in the future due to climate change. Within this thesis, transferable landscape architectural design strategies were developed that use cohabitation and biodiversity enhancing measures to mitigate heat effects in urban areas.**

**12th International Biennial Landscape Barcelona**

**Barcelona November 2023**

**SCHOOL PRIZE**

For further information

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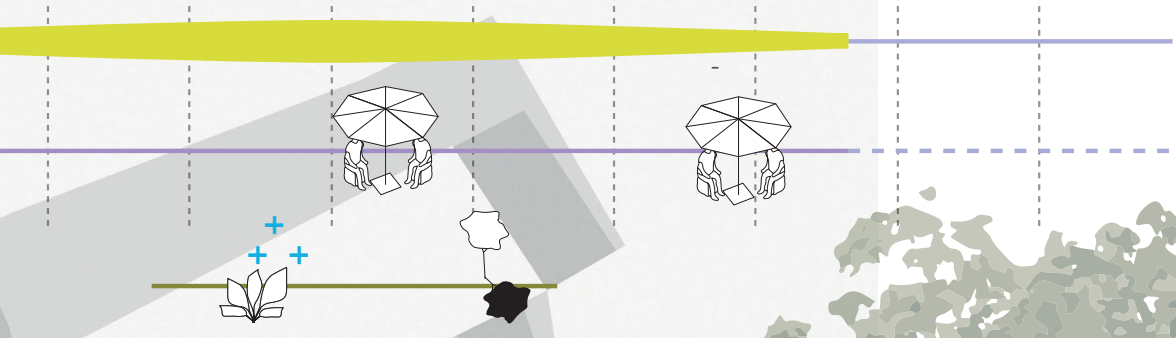
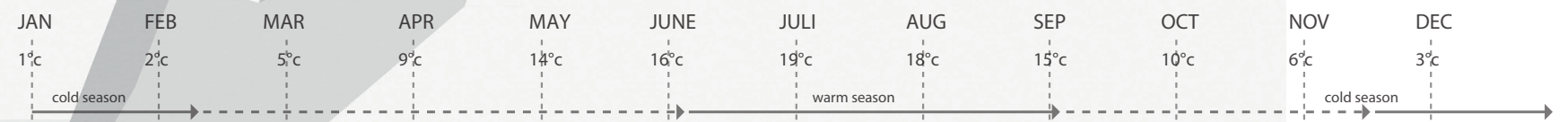
Sede ETSAB - Universitat Politècnica de Catalunya

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COAC - Colegi oficial d'Arquitectes de Catalunya

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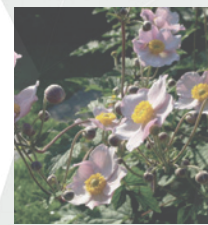




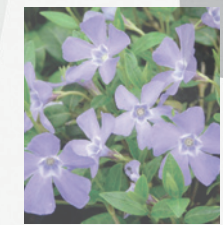
Crocus tommasinianus 'Roseus'



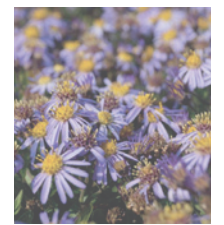
Carex morrowii



Anemone tomentosa 'Robustissima'



Vinca minor 'Bowles'



Aster ageratoides var. adustus 'Nanus'



Waldsteinia geoides

