

Waldlabor Köln (D) – energy, people, climate change and wilderness

In 2010, along a stretch of the Green Belt of Cologne, designed by urban planner Fritz Schumacher in the 1920s and 1930s, the City of Cologne and its sponsors installed the Waldlabor Köln (Forest Laboratory of Cologne) to test out new forms of urban forestry, greatly inspired by the landscape laboratory in Alnarp, Sweden.

The part that is the most operational, for the moment, is the 'Energy Forest', where energy production is part of the recreational landscape, and which is seen as a full-scale experiment. **Fast growing species are pruned, cut and trimmed into temporary forest spaces, partly resulting in dynamic and dramatic designs.** The Forest Lab has a rotation cycle of only two to five years and, as a result, changes tend to happen quickly. Sculpted landscapes and paths disappear with

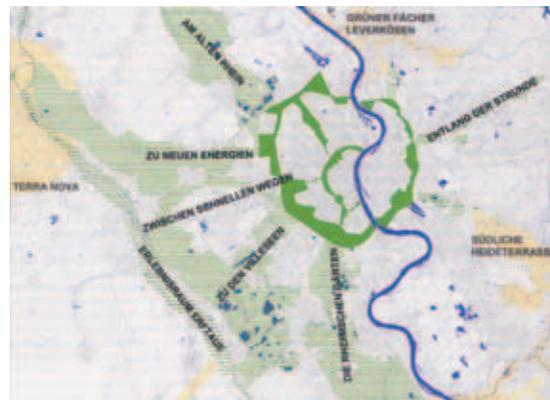
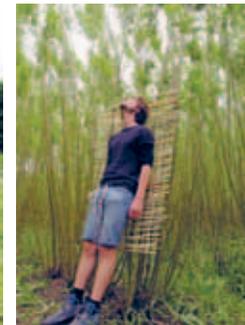
harvests. Through cooperation with RWTH University of Aachen, researchers explore not only the spatial qualities, but also how to best communicate with the public regarding experimentation, process and outcomes.

The other parts of the Forest Lab develop over a longer time span. The People's Forest aims to introduce experimental compositions to create new experiences in an urban forest open to everyone. Specific seasonal qualities and development stages will be under scrutiny, and the attention of the public will be drawn to experiencing aesthetic aspects such as blossom, fall foliage and leaf shapes. The trees for planting have been sponsored individually by local citizens. The Climate Change Forest allows the study of species resistant to drought. In the face of global warming and the expectation of drought

conditions, the laboratory mimics Cologne's urban setting to allow for the evaluation of site-specific species for future use. The Wilderness Forest is a 'control group': What would a forest at this spot become without human influence? Here, one can learn how unstaffed and unmaintained urban forests develop. This area has been left to find its own destiny, with nothing having been added and nothing taken out. This process will show the effects of absentee management, but also highlight the qualities of wilderness.

Frank Lohrberg

Frank Lohrberg graduated in landscape architecture from University of Hanover in 1991, attained his PhD on urban agriculture planning at the University of Stuttgart in 2001, and founded lohrberg stadtlandschaftsarchitektur in 2002. Since 2010 he has been professor of landscape architecture at Aachen University.



Situation of Waldlabor Köln.
Right Ground plan of Waldlabor Köln.



Workshop with students in the Energy Forest, 2016. The workshop intended to explore the specific spatial qualities that a short rotation forest offers. Planted in long rows with only a few species of salix and populus, these forests are often criticized as monotone and unwelcoming. However, students from four German universities showed in a one-week workshop that the plantation could turn into a fascinating and appealing environment. With only few means, artificial settings were created and presented to an enthusiastic public. An ordinary space turned into an urban place, thus guiding local people to a better understanding and a more intense use of the Energy Forest.

All photos Institute of Landscape Architecture RWTH Aachen University

Location **Cologne, Germany**
 Design **lohrberg stadtlandschaftsarchitektur, Stuttgart**
 Total area **25 ha**
 Forest area **16 ha**
 Client: **City of Cologne**
 Commissioned by **Toyota Germany, Rhein Energie AG, donations of citizens**