

# The secret garden

High above the streets of Brussels, permaculture “art farms” flourish and buzz

Jacqueline Fletcher

The OKNO collective connects new media and ecology in the heart of the capital, mapping routes of biodiversity, experimenting with urban gardens and rooting up the amazing ecological history of a very urban environment.

Residents living around Vlaamsesteenweg in the centre of Brussels would probably agree that the ugliest blot on their neighbourhood is the multi-storey car park at No 66. Passers-by and tourists would no doubt concur. What they don't know is that high on the rooftops above the garage, open to the sky and offering a magnificent view of the city, is a permaculture-inspired edible garden. Olive and fruit trees, berries, vegetables, aromatic herbs and flowers bloom in abundance, along with a remarkably large greenhouse and five natural top-bar beehives, all fed by rainwater harvested from surrounding rooftops. This “Urban-ArtFarm” is the work of Annemie Maes, one of the artists in the OKNO collective working at the intersection of art, technology and ecology. Just over the canal on Koolmijnkaai, on a rooftop outside OKNO's workshop space, lies a smaller garden – the prototype – with two more beehives.

## Reclaiming space

To step out onto one of these rooftops is to enter into a different relationship with time. A cool breeze, the rustle of leaves caressed by the wind, a blaze of colours and the soothing buzz of insects seem to suggest that we can relax: Nature is doing its work at its own pace, far removed from our hectic schedules. These gardens were created as part of the OKNO OpenGreens project, which, according to Maes, allows OKNO and its collaborators to sculpture new kinds of public space and interdisciplinary and site-specific art. Also important, she says, “is the recultivating or reclaiming of urban space”.

As she points out, long before car parks were part of humankind's frame of reference, the Vlaamsesteenweg was the location of the medieval Onze Lieve Vrouw ter Rozen, where nuns cultivated orchards and vegetable gardens. Maes has unearthed maps and documentation from the city archives that clearly show the layout of the location that is now around De Markten. Here, she says, “we have a type of palimpsest of the city: the foundations of the monastery walls below the car park are mirrored in the edible gardens on the rooftops, adding new layers to the living city that meet the needs of its 21st century residents”. OKNO/OpenGreens artists, who receive funding from the government of Flanders, have spent several years documenting the ecological map of Brussels and developing technology that allows them to monitor the spread of wildlife in urban spaces. The bees are fundamental to the research and the underpinning concept: ecological corridors of biodiversity in urban environments. The green spaces – parks, gardens and abandoned post-industrial fields – are mapped with the help of technology and translated to databases that are made available for the general public online and through open-source software. OKNO works with scientists and ICT specialists to provide support for bottom-up urban ecology initiatives and, in the process, create a “social sculpture” (a term coined by the German artist Joseph Beuys) through the activities of participating citizens maintaining these green corridors. OKNO offers workshops and walks in which the public can discover urban wildlife, edible wild plants and take part in monitoring sites and the technologies. As I talk to Maes, she's busy using beeswax to cover sensors that monitor heat, humidity and levels of carbon dioxide in the hive, as well as the sonic vibrations measuring the bees' activities. Among the beeswax she finds a tiny detached bee head with its tongue clearly visible. Never having seen a bee's tongue before, I was fascinated by her

explanation of how the insect sucks nectar from flowers. She continues to wax lyrical about her journey of discovery through the natural world since she embarked on the OpenGreens project: the patterns found in nature, such as the honeycomb's hexagon, or the relationship between phyllotaxis, patterns of leaf growth, and the mathematical Fibonacci Sequence. Maes has taken courses in permaculture and ethno-botany and studies microbes under a strong electro-microscope to determine the health of the soil. “The foraging habits of honey bees are a crucial aspect of mapping the urban OpenGreen Corridors,” she explains. Attempts to chart their flight routes are increasingly facilitating the further development of the green zone in a six-kilometre radius of the hive. OKNO organises bee-friendly botanical walks for the public around the city's parks, gardens and tree-lined avenues as well as abandoned spaces where wild flowers and herbs facilitate nectar and pollen foraging. Bees can also tell us a great deal about pollution levels and the general health of the environment. Maes explains that the Urban-ArtFarm is a place where artists and gardeners can research the pros and cons of urban agriculture and explore sustainable ways of living in the city. The OpenGreens database and wiki archives contain a wealth of information and advice on starting an urban permaculture project. It has links to articles and websites on such topics as monitoring soil and atmosphere and harvesting water, plus open source software that can be used with a 3D printer to create a DIY beehive and more.

*OKNO is hosting a two-day Permaculture Initiation Workshop on 11-12 September*

► [www.okno.be](http://www.okno.be)  
► <http://opengreens.okno.be>



Just a fraction of the OKNO garden atop the Lepage car park on Brussels' Vlaamsesteenweg