



# GREEN SURGE

## MALMÖ, SWEDEN

*Case Study City Portrait;  
part of a GREEN SURGE study on urban green  
infrastructure planning and governance in 20  
European cities*

**In cooperation with:**

**Ola Melin, City of Malmö**



**Main Author: Tim Delshammar**

**Dept. of Landscape Architecture, Planning and Management, Sveriges Lantbruksuniversitet (SLU), Sweden**

*1.0 • February 5th 2015*



## INTRODUCTION

This case study portrait is part of a series of 20 case studies on urban green infrastructure planning and governance in European cities, undertaken in the course of the GREEN SURGE project. GREEN SURGE is a trans-national research project funded through the European Union's 7th Framework Programme. GREEN SURGE is an acronym for "Green Infrastructure and Urban Biodiversity for Sustainable Urban Development and the Green Economy". The project is identifying, developing and testing ways of connecting green spaces, biodiversity, people and the green economy, in order to meet the major urban challenges related to, e.g., climate change adaptation, demographic changes, human health and well-being.

Each portraits has the following content:

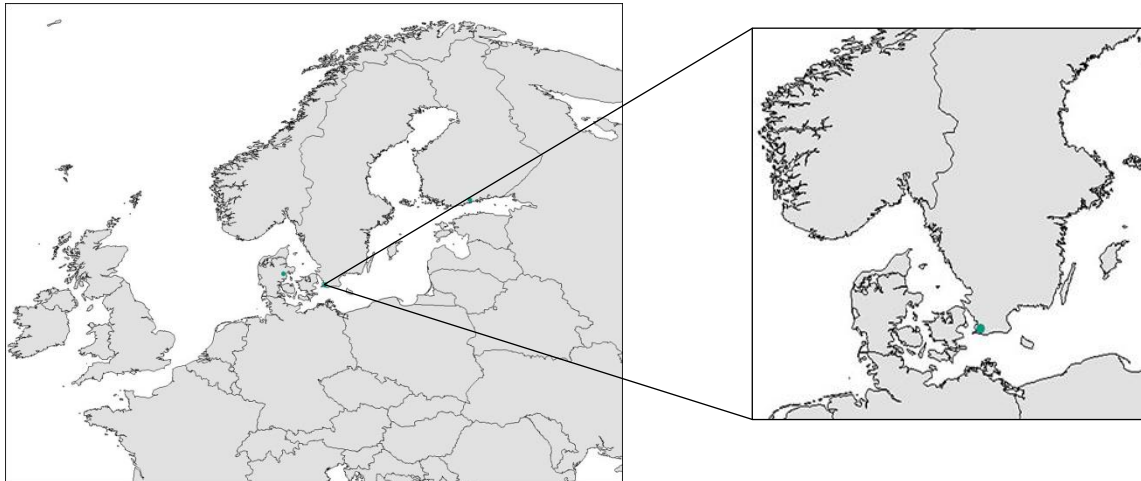
- **INTRODUCTION** – which contains location and green structure maps as well as basic information on the city-region (core city and larger urban zone).
- **URBAN AND REGIONAL PLANNING CHARACTERISTICS** – which describes the main characteristics of the planning system including instruments for the protection and enhancement of green space and objectives, achievements and challenges in urban green space planning
- **EXPERIENCES WITH INNOVATIVE GOVERNANCE PRACTICES** – which outlines how, in the views of selected actors, 'traditional' government-driven steering of green space planning and management on the one hand, and emerging forms of governance with a greater role for non-government actors on the other, play out in different cities.
- **URBAN GREEN INFRASTRUCTURE (UGI) THEMES AND STRATEGIES** – which considers the main themes about planning and how this relates to the concept of UGI as well as policy concepts. Furthermore, implementation and evaluation of planning instruments are discussed
- **URBAN GREEN SPACES: LINKAGES BETWEEN BIODIVERSITY AND CULTURE** – which is about the linkages between cultural diversity and biological diversity and how these impact on urban green spaces and urban green structures. Urban biocultural diversity is a recent concept emphasizing the links between biological diversity and cultural diversity. Research and policy directed at biocultural diversity can focus on the roles of ethnic or other groups, the role of a great range of cultural practices (which may or may not be connected to certain groups), and to physical objects or species bearing a relationship with specific cultural-historical practices.
- **CONCLUSION** to wrap up the main findings

A report with all case studies and more detailed background information can be found on the project's website <http://greensurge.eu>.

## 1) INTRODUCTION: Facts and Figures

<b>Core city</b>	Malmö	<b>Biogeographic region</b>	Continental
<b>Region</b>	Scania/Oresund	<b>Planning family</b>	Nordic/Comprehensive integrated
<b>Area</b> <ul style="list-style-type: none"> <li>▪ Core city</li> <li>▪ Larger urban zone</li> </ul>	15 368 ha 184 675 ha	<b>Population (2011)</b> <ul style="list-style-type: none"> <li>▪ Core city</li> <li>▪ Larger urban zone</li> </ul>	302 835 615 721
<b>Average annual population change rate</b> (1990-2012; Core city)	1.46	<b>Public recreational green space per capita</b> (2006, Core city; m <sup>2</sup> per inhabitants)	35.01

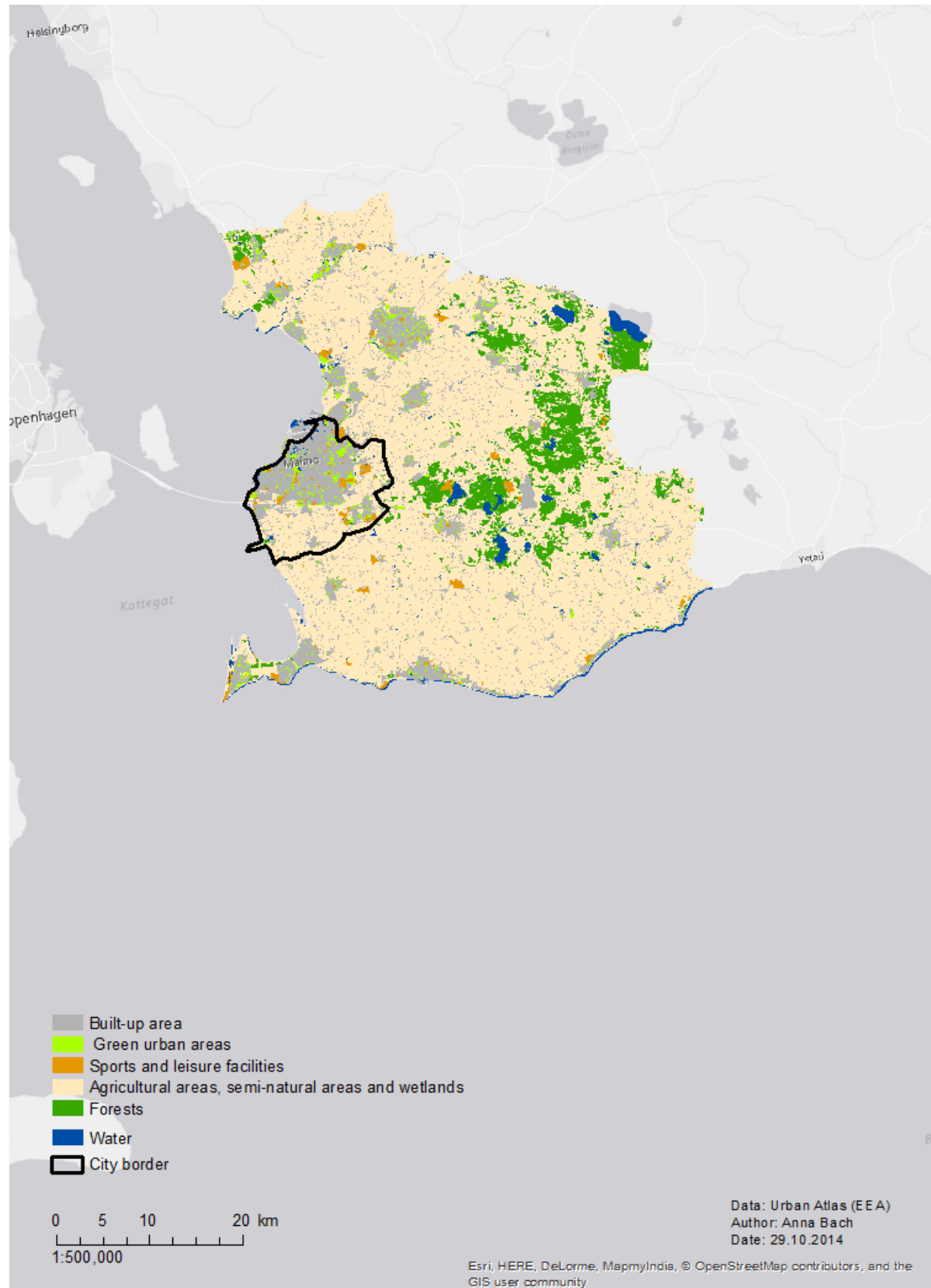
### Location Map



Malmö is located in the South of Sweden, close to the Danish capital Copenhagen. With 300 000 inhabitants it is the 3<sup>rd</sup> largest city of the country. The population consists of 178 nationalities and one third is born abroad. The city's industrial era peaked in the beginning of the 1970s. After that, the large wharf and many other industries downsized or closed down. The transition from an industrial society towards a service-oriented society was facilitated by opening the new university in 1998 and the bridge between Malmö and Copenhagen. Between 1970 and 1985, Malmö became a shrinking city, but since then the city has again seen an increase in the urban population. Today it is a functional unit with Copenhagen (Denmark) and Lund (Sweden), integrating also the surrounding Oresund region with about 3.7 million inhabitants. There is a joint labour and housing market. The region is among the main growth regions in Europe.

Malmö is surrounded by agricultural land and the sea. The agricultural land is mainly intensively used and only to a very limited extent accessible for recreation. The urban areas consist of over 50 % green space, including parks and green in residential areas.

## Map of Larger Urban Zone



## 2) URBAN AND REGIONAL PLANNING CHARACTERISTICS

### General description of the planning system

The entire country is divided into 290 municipalities, which are the main planning unit. The municipalities cover both urban and rural areas. However, the municipal authorities in Sweden have a strong position in the planning system when it comes to urban areas while the planning legislation gives less support for municipal planning of rural areas and regional planning. This means that municipalities have to negotiate with each other and with rural landowners to secure green spaces of regional importance in rural areas.

On a national level, the Swedish planning system is regulated by the Swedish Planning and Building Act. All municipalities are imposed by law to have a Comprehensive Plan (masterplan) covering the entire municipality. The municipal authorities are the legal entities that decide upon spatial planning in urban areas. Within a municipality, there are three planning levels: The policy level (including the comprehensive plan), legal land use planning (detailed planning) and implementation.

In Malmö policies and the Comprehensive Plan are developed in cooperation between several municipal departments. Important policies are the Green Plan, Climate Adaptation Plan, Storm Water Strategy and Nature Conservation Plan. The detailed planning is done by the City Planning Office. The structure of the planning system has not been changed in the last decades and no future changes are planned.

### Instruments for the protection and enhancement of urban green space

Urban green spaces on public and private land in Sweden are protected by detailed plans. Changes in land use must be approved by the municipal authorities. In Malmö the Green Plan from 2003 is a guiding tool to protect and secure existing public green spaces and future development. The focus is on securing green space quantitatively. The Green Plan will be updated in 2015/16. The new plan will probably focus on both quantity and quality of public and private green spaces, including securing ecosystem services. Implementation is the responsibility of the Street and Parks Department, which coordinates design, maintenance and renewal of public green spaces.

To secure green spaces on private land from future development, the City Planning Office has until now used the green area ratio (GAR) as a planning tool in several detailed plans. GAR has also been used when the city has sold land for development.

Regional green space planning is achieved by voluntary cooperation between municipalities and by the Skåne Regional Council. The regional council owns and manages recreational areas of regional importance.

### Objectives, achievements and challenges in urban green space planning

Achieving a dense urban structure is one main spatial planning goal. Density is a mean to avoid urban sprawl. As a consequence, brownfields as well as green spaces will be converted into housing. Thus, the amount of open space per capita will decrease. The main challenge is to reconcile the limited green space with the demands of a growing population. According to the city gardener it is important to deal with the challenges of infill development. The main objectives and challenges are to secure enough green space and connectivity between spaces. Further, the municipality aims to increase quality (including funding for maintenance) of green space. It also aims to create multifunctional green spaces that will enable multiple uses, be attractive for multiple users and provide multiple benefits.

According to the city gardener, important recent achievements are a park and a residential area--the 100 hectare park Lindängelund (under construction on agricultural land) and the new residential area Gyllins trädgård, which integrates the qualities and natural values of the nursery that was previously located on the site.

There also have been achievements of national importance with ecosystem-based test beds such as open storm-water systems, green roofs, green walls and new forms of urban agriculture. These experiments have particularly taken place in the districts Västra hamnen and Augustenborg. The experiments have to some extent been carried out by the Street and Parks Department, but in many cases other municipal departments, housing companies and businesses have played a role.



**Malmö's major challenges** (from left to right): Integrating green spaces in a compact urban structure: Public green space on the rooftop of a shopping mall in the Hyllie city district. -- Targeting social gaps: Renewal of a residential yard in the Rosengård city district. (Both photos: Tim Delshammar)



**Malmö's major achievements** (from left to right): Experiments and testbeds for ecosystem services: Augustenborg open stormwater system (Photo: Tim Delshammar). -- The park Lindängelund (still being constructed) is a new large park of more than 100 hectares. It is planned to contain a broad variety of habitats and species (Illustration: Sydväst Arkitektur och Landskap. © Malmö stad).

### 3) EXPERIENCES WITH INNOVATIVE GOVERNANCE PRACTICES

#### Government ideas and practices regarding participation

Citizen participation in public service delivery is generally considered as desirable by city officials in Malmö. However, policy documents focus on participation in regard to schools, health care and spatial planning, but not explicitly regarding the design and management of green spaces. During the last decade the debate on sustainable urban development has inspired politicians, officials and citizens to find solutions involving citizens and NGOs. But this is still mainly an exception in municipal practice. The final report from the Commission for Socially Sustainable Malmö points out that participation in everyday issues is a major challenge for the future. In public green space management, many small-scale examples of user participation can be found to-date, but these are decided on an operational level by municipal urban planners.

Urban agriculture on public space (described below) is one example of innovative governance mentioned by the city gardener. It has also gained a lot of interest from other municipal departments and from the media. Another example of innovation that has gained national recognition is the planning of the new square Rosens Röda Matta. The planning process was facilitated by a group of local teenage girls who were commissioned to lead a dialogue with residents in the area.

#### Local initiatives

Some of the most important local initiatives related to urban green space are urban agriculture initiatives. During the last couple of years an informal network consisting of public officials and NGOs with an interest in urban agriculture has been active. This network has regular meetings to exchange knowledge.

From a city-wide perspective, probably the most thorough participatory practice is carried out by public and private housing companies. Lately, many have started to employ residents in poor areas as caretakers in their own block. The intention of this is to support positive change of employment rates and responsibility among residents.

#### Supporting and hindering factors in participation as perceived by city officials

According to the city gardener, the main reason for giving citizens influence is that they pay for the parks through taxes. Further, participation can increase user value as well as provide urban planners with relevant knowledge. The hindering factors mentioned were that it can sometimes be hard to reach consensus, that participation can be in conflict with existing detailed plans and that the budget is often limited. City officials do not always have the means to give citizens what they demand.



### Examples of initiatives coming from local stakeholders

#### Slottsträdgården

Slottsträdgården was initiated in 1994 by a group of citizens that later became a Friends group. The site was an abandoned nursery in the central city. The idea was to establish an open garden with the main aim to support social sustainability. The Street and Parks Department gave the group access to the site and they began to construct the garden. Gradually the department got more involved and made important investments, for example, the construction of footpaths, a café and a greenhouse.

The department also took over tasks and responsibilities. Still it is a place where the Friends group, schools, and immigrants participate in farming activities. It is also a place visited by many city residents and tourists. However, the original idea that it should be a place completely open to all interested people has never been fulfilled.



(Photo: Tim Delshammar)

#### Enskifteshagen

Enskifteshagen was initiated in 2010 by the urban farmers network Mykorrhiza. The ideas were very similar to Slottsträdgården sixteen years earlier. The main difference is that the site is in an existing park in a residential area. Though the garden was initiated by an already existing group (or network), their capacity for building a lasting organization was weak and there have been problems in establishing continuity in maintenance and in cooperation with the Street and Parks Department.

The garden is still regarded as an experiment and there are many unsolved questions, like how to make all residents feel included and how to manage the garden in the long run. The debate about the garden became a starting point to write a city-wide policy on urban agriculture in public parks.



(Photo: Tim Delshammar)



## 4) URBAN GREEN INFRASTRUCTURE (UGI) THEMES AND STRATEGIES

### Main themes related to urban green space

The Comprehensive Plan (approved by the municipal executive board) sets the goal for Malmö to have a compact and green urban structure in the future. This goal targets both public and private spaces. The Comprehensive Plan states that “ecosystem services shall be assessed, considered and strengthened in spatial planning and maintenance to secure important values and functions.” In 2014 the City Planning Office initiated a project to explore how ecosystem services can be considered in spatial planning and so far it is a goal to include ecosystem services in the next Green Plan.

Another important objective is how green spaces can bridge the gaps between the wealthier (healthier and better educated) and the poorer parts of the city. While Malmö has been in the forefront of ecological sustainable urban development in Sweden for more than a decade, social sustainability has only lately been lifted to the top of the agenda by leading politicians.

### Comprehensive Plan for the City of Malmö

**Original title:** Översiktsplan för Malmö

**Date:** 2014

**Responsible department(s):** The City Planning Office

**Spatial scale:** City-region

**Legal status:** Non-binding, but approved by politics

### Main themes related to urban green space

- Development of a compact and green city
- Social sustainability

### Parallels with GREEN-SURGE policy concepts

- Adaptation to climate change
- Ecosystem services
- Health
- Social cohesion

### Understanding of UGI and representation of UGI principles

In the Comprehensive Plan, the term green structure is used for an interconnected network of green spaces that provides multiple benefits for humans and embodies the principles of multifunctionality and connectivity. The plan aims at “a variety of small and large parks, natural areas and squares strategically placed, evenly distributed and interconnected in a network of green corridors.” As mentioned above, the provision of ecosystem services shall be increased and it is stated that “parks, recreational facilities and storm water systems occupy a lot of space and for an efficient use of land there is a need for new solutions to provide a variety of features. The range can be enhanced through multifunctionality.”

Green spaces are considered as integrated with other infrastructure. Green space is treated the same way as housing and transport in the comprehensive plan and is discussed mainly as linked to the residential infrastructure (to give access to green space for residents). In some parts green space is considered as integrated with the storm water management system.

### Implementation and evaluation

While the city is becoming more compact, competition for land is increasing. On one hand, some green spaces (parks and residential yards) have been converted to built up blocks and this will continue to happen in the future. On the other hand, the presence of development projects generally means that funding is available to construct or improve public and private green spaces in the affected area. The Street and Parks Department receives funding for maintenance, renewal and new projects (even if there might be a perceived lack of resources). Also other green space managers have funding for i.e. residential areas, cemeteries and sport grounds.

Each managing organisation does its own monitoring. This includes user surveys, records of complaints and informal contacts. This feedback gives important knowledge of particularities, but not always knowledge about the entire green structure.

## 5) URBAN GREEN SPACES: LINKAGES BETWEEN BIODIVERSITY AND CULTURE

### Views of what biocultural diversity is referring to and how it is addressed in policy

The concept of biocultural diversity is not explicitly used in the municipal green space policy in Malmö, but there is a well-established policy and related practices regarding the conservation of biodiversity in the sense of species richness and abundance of biotopes. Focused attention is given to the maintenance of a diversity of urban green spaces in a variety of parks and garden complexes differing in design and function and containing a wide variety of native and non-native species. Attention is also given to the connectivity between these spaces. In response to the spreading of Dutch Elm disease, efforts are undertaken to diversify tree composition and try out new tree species.

The notion of green spaces as a provider of ecosystem services was introduced in the Comprehensive Plan from 2014. The main focus is on how green spaces can meet the demands of different groups characterised by class, age, gender and outdoor recreational and nature-related hobbies. Parks are generally understood as important places for increasing social cohesion, e.g. by providing playgrounds to attract families with children. However, in practice this topic has not yet been explored in-depth. There is, for instance, no information on how the process of increasing social cohesion works and which groups are to be involved in such a process.

At present ethnicity is not specifically considered even though some districts in Malmö are entirely populated by immigrants. As an example of biocultural diversity, the city gardener mentioned that some immigrant groups prefer open green spaces where they can have picnics or barbecues. The main feature of these places is that they allow for large groups to gather, typically on vast lawns.

Many parks are considered as heritage sites; they often include specific heritage objects such as ancient buildings. However, there are only a few examples of systematically linking the heritage buildings with related biotopes, e.g. by joint conservation of old farm buildings and ancient meadows.

### Bioculturally significant places

Considering specific biocultural places, good examples of biocultural diversity are new urban gardening spaces that recently have been constructed in parks or in residential areas. These new garden complexes supplement the traditional allotment gardens that have been established since 1895. The gardens reflect local citizen's interests in interacting with biodiversity.

Another recent initiative in stimulating urban living with biodiversity is the development of new types of urban biotopes such as wetlands. These act as resources for teaching and learning about the significance of biodiversity and ecological services.



*A community garden in the city district Seved (photo: Tim Delshammar).*

## 6) CONCLUSION

In Sweden the municipal authorities have strong legal support to secure urban green spaces in the planning process. Still, as the city of Malmö is growing, conflicts between new housing developments and green spaces rise. There is not a simple solution at hand for this challenge. Existing planning regulations allow the city to claim financial compensation from developers in new development projects for the design and construction of green spaces. But there is a need for public financing for upgrading existing areas. The planning system is considerably weaker when it comes to rural and regional planning.

Due to several experiments and test beds with ecosystem-based solutions, the city has been inspiring change not only within the city, but also in the rest of Sweden and Denmark. The strategy of planning for a compact and green city is firmly established among officials and politicians. Lately, planning with (and for) ecosystem services has been recognized as a desirable strategy. This has been tried out to some extent in single projects, but municipal city planners have not yet planned a city district that is both compact, and green/ecosystem-based.

Several small-scale and project-based examples of user involvement in planning and maintenance can be found. The housing sector, not only social housing but also private property owners, has established approaches to involve residents in planning and maintenance of green space.

With 178 nationalities and about a third of the residents born abroad, Malmö is a culturally diverse city. However, because Sweden has a tradition of being a welfare state, focus has mainly been on needs of groups in terms of ages, gender or disability. Lately, there has been more attention on the gap between the wealthier and more disadvantaged parts of the city. It is now a politically recognized goal to bridge this gap. However, this has not yet been targeted in green space planning and remains a challenge.

## LINKS AND REFERENCES

### Websites of municipality and core organizations

- **City of Malmö:** <http://www.malmo.se/>

### References

#### For facts in Introduction:

- **Biogeographic region:** EEA (2012). *Biogeographic regions in Europe*. Available from [www.eea.europa.eu/data-and-maps/figures/biogeographical-regions-in-europe-1](http://www.eea.europa.eu/data-and-maps/figures/biogeographical-regions-in-europe-1); accessed 18/09/2014.
- **Area core city and larger urban zone:** *Urban Atlas*.
- **Population core city and larger urban zone** (2012 or latest): mainly *Urban Audit*. Note: in a few cases the population numbers have been provided by researchers based on statistical data
- **Average annual population change rate** (Core city; 1990-2012 or similar): calculated  $[(100 * \text{population number last year} / \text{population number first year}) - 100] / (\text{last year} - \text{first year})$  based on *Urban Audit*.
- **Public recreational green space** (Core city; m<sup>2</sup> per inhabitants; 2006): based on *Urban Audit* and *Urban Atlas*. *Urban Atlas* defines urban green space as “public green areas for predominantly recreational use”. Peri-urban natural areas, such as forests and agricultural land, are mapped as green urban areas only in certain cases. In general, peri-urban green areas are not counted. Private green and blue areas are also not included. Further, green spaces with less than 250 m<sup>2</sup> are not mapped as well. This leads to deviation with per capita green space values used by city officials
- **Location map:** based on Natural Earth (2014): *1:10m Cultural Vectors*. Available from [www.naturalearthdata.com/downloads/10m-cultural-vectors/](http://www.naturalearthdata.com/downloads/10m-cultural-vectors/); accessed 22/09/2014.
- **Map of Larger Urban Zone:** based *Urban Atlas*.
- **Urban Atlas:** EEA (2010). *Urban Atlas*. Available from <http://www.eea.europa.eu/data-and-maps/data/urban-atlas#tab-metadata>; accessed 18/09/2014.
- **Urban Audit:** Eurostat (2014). *Urban Audit*. Available from [http://epp.eurostat.ec.europa.eu/portal/-page/portal/region\\_cities/city\\_urban/data\\_cities/database\\_sub1](http://epp.eurostat.ec.europa.eu/portal/-page/portal/region_cities/city_urban/data_cities/database_sub1); accessed 18/09/2014.

#### For the rest:

- **Interview** with City gardener, Head of the unit for City Public Environment Ola Melin, City of Malmö, Street and Parks Department on 18.6.2014.

### Planning and policy documents

- **Final Report from the Commission for a Socially Sustainable Malmö:** Malmö stad (2013). *Malmöns väg mot en hållbar framtid. Hälsa, välfärd och rättvisa*. Available from [http://www.malmo.se/download/18.3108-a6ec1445513e589b92/1393252195410/malmo%CC%88kommissionen\\_slutrapport\\_2014.pdf](http://www.malmo.se/download/18.3108-a6ec1445513e589b92/1393252195410/malmo%CC%88kommissionen_slutrapport_2014.pdf) ; accessed 06.10.2014
- **Malmö Comprehensive Plan:** Malmö stad (2014). *Översiktsplan för Malmö. Planstrategi*. Available from [http://www.malmo.se/download/18.5bb0a05f145db1bc43d6ac4/1401438553855/OP2012\\_planstrategi\\_antagen\\_140522.pdf](http://www.malmo.se/download/18.5bb0a05f145db1bc43d6ac4/1401438553855/OP2012_planstrategi_antagen_140522.pdf); accessed 06.10.2014
- **Malmö Green Plan:** Malmö stad (2003). *Grönplan för Malmö 2003*. Available from <http://www.malmo.se/-download/18.5d8108001222c393c008000101293/1383647019267/Gr%C3%B6nplan+f%C3%B6r+>

Malm%C3%B6+2003.pdf; accessed 06.10.2014

- **Malmö Nature Conservations Plan, Part 1:** Malmö stad (2012). *Naturvårdsplan för Malmö stad. Programdel*. Available from <http://www.malmo.se/download/18.1558e15e13973eeaa0e800028862/-1383643919286/naturv%C3%A5rdplan+del+1+l%C3%A5guppl%C3%B6st+20120628.pdf> ; accessed 06.10.2014
- **Malmö Nature Conservations Plan, Part 2:** Malmö stad (2012). *Naturvårdsplan för Malmö stad. Områdesbeskrivningar*. Available from <http://www.malmo.se/download/18.1558e15e13973eeaa0e800028863/-1383643919463/NVP+del+II+12+04+30.pdf> ; accessed 06.10.2014
- **Malmö Storm Water Strategy:** Malmö stad (2008). *Dagvattenstrategi för Malmö*. Available from [www.malmo.se/download/18.72bfc4c412fc1476e02800031805/1383647263192/Dagvattenstrategi\\_2008.pdf](http://www.malmo.se/download/18.72bfc4c412fc1476e02800031805/1383647263192/Dagvattenstrategi_2008.pdf) ; accessed 06.10.2014

### Acknowledgements

We thank Mr. Ola Melin, City gardener, City of Malmö for being the interview partner, as well as landscape architects Sten Göransson and Juliet Lidgren, City of Malmö for reviewing the portrait.

### Authors and contributors

#### Main Author(s):

Tim Delshammar  
Dept. of Landscape Architecture, Planning and Management,  
Sveriges Lantbruksuniversitet (SLU), Sweden

#### GREEN SURGE Partner(s) involved:

SLU

#### Researcher(s):

Tim Delshammar

#### In cooperation with:

Ola Melin, City of Malmö