State of Swedish Parks

- A Pilot Study

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Project report

This report relates to the project no 144/15 from Movium Partnerskap to Department of Landscape Architecture, Planning and Management, and is reported to MIVIUM via this report.

Project beginning: August 2015
Project ending: April 2016
The project has followed the overall timeline.

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Applied amount: 336 000 SEK. The project has followed the budget allocations.
The project is a pre-study, and has not been published at this time.

The project will continue into phase 2 and 3 as explained in the application, and as detailed below. Thus, the project anticipates applying MOVIUM for additional funding at the autumn application deadline, 2016.

Summary

This study is, through the use of a comprehensive survey sent to all Swedish park managers during the spring of 2016, the first stage of assessing the state of Swedish parks. The aim was to review the state of the Swedish public parks and undertake an assessment and analysis of the key issues and challenges that public parks in Sweden are currently facing.

The Park Managers Survey was carried out as an online questionnaire sent to all local community (municipal) park managers and park departments in Sweden. The compilation of respondents and the online survey system was identified, and for each municipality we identified the organization and the relevant individuals to answer the questionnaire. Also, the questionnaire was developed and tested in close cooperation with the 13 Movium Partners being part of the project. We also carried out the final survey (originally expected to be in Phase 2) which addressed issues of finance and resourcing; the quantity and quality of parks being managed; organizational arrangements for maintenance; information on park visitors and volunteers; and, issues of strategic policy.

Further, an investigation into how user groups and general users can complement the park manager survey, has been conducted and is reported.

Contents

Introduction

Urban green spaces provide a number of ecosystem services, (e.g. regulating, producing and cultural) as described in the Millennium Ecosystem Assessment (McGranahan et al., 2005). These are particularly important in an era of continued urbanisation (United Nations, 2014). The urban population in Sweden was 86% of the total population in 2014 (United Nations, 2014), and thus urban parks and other green spaces constitute a central part of most Swedes everyday life.

Urbanisation and other grand societal challenges such as climate change (IPCC 2014) and demographic changes (European Commission 2011) have created new societal (including economic) realities which provide new context for urban green spaces, their use, and their management. The sustainable supply of ecosystem services depends not only on the presence of green spaces but also on the management on its management. Insufficient protection, management and increased fragmentation could undermine the supply of ecosystem services (McGranahan et al., 2005).

The current state of urban parks and green spaces in the UK is dominated by maintenance and investment budgets being reduced (Neal et al., 2014). While park usage is increasing and communities are taking on a greater stewardship role, facilities are becoming costlier to use and some parks may simply be sold or transferred to the care of other stakeholders. We do not know if such scenarios are also evident for Sweden, since a national survey on the state of Swedish parks have not been carried out. The UK example (Neal et al., 2014) may serve as inspiration to Sweden, since many aspects in organizing, managing and maintaining urban parks are similar (Lindholst, 2009).

In Sweden, almost 17 billion SEK are used annually to manage urban green spaces (Persson et al. 2012). Swedish green space management is distributed among at least 40,000 organizations, incl. local authorities, housing companies and other housing organizations, estate companies and regional authorities. The rather complicated green space management structure in Sweden is comparable to the other Scandinavian countries (Randrup & Persson, 2009, Bretzer et al., 2016, Leiren et al., 2016).

In the UK, a national survey focusing on key issues related to public parks was published in 2014 (Neal et al., 2014). The study proved that a number of challenges exists in managing public green spaces, and as such guides planners, managers and users to prioritize and take actions in the future. There is reason to believe that the findings from the UK survey may be relevant in Sweden too, as our hypothesis is that there is a general downsizing of the Swedish public park organizations and that this affects the quality of public green spaces in a way which is notable by the general public. If our hypothesis is verified, we will be able to address why and suggest means to alter this trend.

Thus, the objective with this study was to undertake an assessment and analysis of the key issues and challenges that public parks in Sweden are currently facing. By focusing on a broad range of information relating to both finance and resourcing; the quantity and quality of parks being managed; organizational arrangements for maintenance; information on park visitors and volunteers; and, issues of strategic policy, and various user perspectives, we will generate a number of interesting facts which will make it possible to discuss and develop the future of public parks in Sweden on a higher level.

Initially, we planned to carry out the overall study in two phases: Phase one with a focus on the *development and test* of three surveys focusing on three different stakeholder groups:

1) **The Park Managers Survey** with focus on finance and resourcing; the quantity and quality of parks being managed; organizational arrangements for maintenance; information on park visitors and volunteers; and, issues of strategic policy.

2) **The User Groups Survey** with focus on size and structure of user groups; issues of funding and resourcing; the quality and condition of their individual (local) park; the level of support the group receives; and, the range of work the group is involved with.

3) **The Public Opinions Survey** with focus on the general public use of parks and understanding of how important parks are to the public's quality of life; what they consider to be the current condition of their local park; the trend in that condition; the level of concern they may have, if any, in relation to reducing local council budgets for parks; and, what they think should be the priorities for spending on parks in the future in light of this squeeze on budgets.

In phase two we planned to *conduct* the surveys in order to create a national overview of the state of Swedish parks. The three nation-wide approach will together build an improved and broader evidence base.

Movium Partnerskap has funded the initial Phase 1

Methodology

This study was combined with the FOMA project, 'Miljöövervakning av Sveriges urbana trädbestånd', as a part of SLU's current analysis related to the urban environmental program. The FOMA project has focus on urban trees, whereas this MOVIUM funded project has focus on green spaces at large, including urban trees. Since both the FOMA project and this project intended to send surveys to all municipal park authorities regarding budgets, maintenance, policy issues and quality, the projects combined the two initiatives.

Thus, this study has combined both phase one and two in regard of the park manager survey, thereby developing and carrying out this survey. For the two surveys related to user groups and public opinions, we have conducted some research in line with the application, which is all reported in the following section.

Park Managers Survey

The survey has become larger and more comprehensive than first anticipated, since it also involves extensive data regarding public urban tress. The data report from this survey will be published in a separate report.

We have constructed the survey on a similar study being performed in the UK (Neal et al., 2014), and an American study on urban trees, performed by Hauer and Peterson (2016). The leading researchers behind these two studies were contacted and their experiences and recommendations have been included in the preparation of the survey.

A preliminary version of the survey was tested among the 13 municipalities partnering in the MOVIUM project. The municipalities answered all questions via the digital survey-tool Netigate. All answers were superficially analysed and used as background for a workshop held at SLU during the spring of 2016. At the workshop the municipalities commented and discussed questions as well as answers. After the workshop, the survey was altered according to the workshop discussions. The revised survey was sent to all Swedish municipalities in February of 2016.

The survey was grouped according to the initial project descriptions (MOVIUM as well as FOMA projects), and focused on overall management and maintenance of green spaces in general and urban trees in particular:

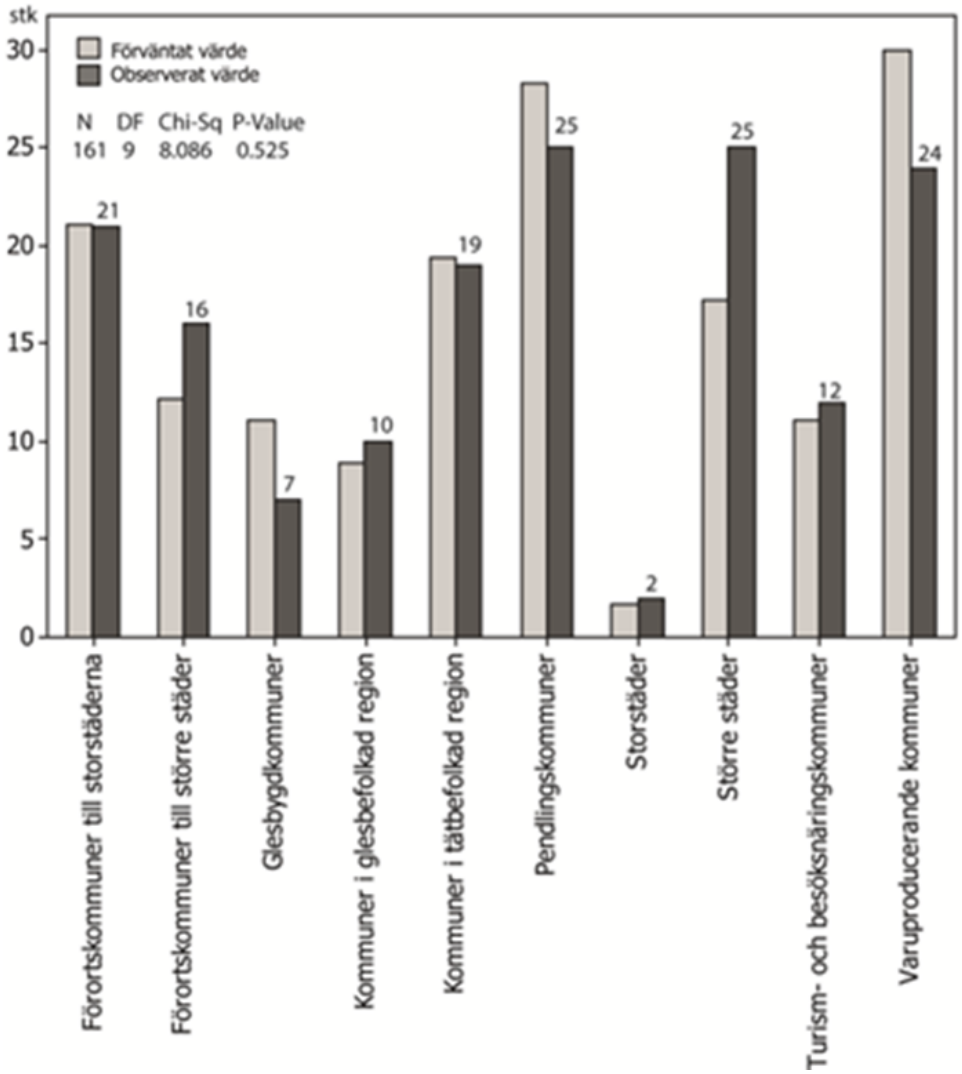
- Budget/Financing included questions related to the public authorities' economic situation and specifically the economic resources present in relation to management of green spaces and trees. Questions also included information related to the historical development and how the managers saw the future resource allocations.
- Maintenance of green spaces and trees included questions related to the daily maintenance, e.g., related to personnel, type of entrepreneurs being used (public / private), total number of areas /

trees, as well as how these have developed over time and how they are expected to be developed in the future.
- Policy, plans and strategies included questions about the strategic documents used in order to steer and develop the areas / trees.
- Quality included questions related to the perceived quality of the green areas and urban trees.
- Tree inventories included questions specifically related to urban trees, e.g. about management systems such as tree inventories and use of digital data systems.

All 290 Swedish municipal homepages were retrieved in order to generate right contact names and addresses. Personnel with the highest responsibility for green spaces and trees were selected as contact persons. If more than one person was identified, all were included as recipients of the survey. The actual distribution of the survey and reminders was carried out according to the following:

- An e-mail was sent to all potential recipients of the survey one week ahead of the actual survey distribution.
- All e-mails which were immediately returned were analysed for spelling errors or if for some reason the specific recipient was no longer available. If possible, new addresses were identified.
- The survey itself was sent to all electronically, with a notion that the responses also could be printed and returned via ordinary mail.
- Two weeks after the first distribution, a reminder was sent to all who had not responded at that time. This reminder was sent via e-mail and via ordinary mail.
- Three weeks after the first distribution, another electronic reminder was sent to all who had not responded at that time.
- Four week after the first distribution a final reminder was sent to all who had not yet responded.

The written answers retrieved via ordinary mail was typed in manually to Netigate before all responses was downloaded to Microsoft Excel 2010. All answers were evaluated manually for obvious errors, and in this process 8 double answers were deleted. The most recent and most comprehensive answers were kept. Also surveys including just a few answers were deleted. In total 161 surveys (55.5% response rate), were included in the dataset, and formed the basis for further analysis. This is regarded as an acceptable response rate, seen in relation to similar studies carried out in Sweden (Randrup & Persson, 2009 (30%); Nielsen et al., 2013 (52%)).



Figur 1. Light gray columns shows the expected distribution of answers per municipal group based on a random selection of the 161 participating municipalities in the park managers survey. The dark grey columns show the actual distribution based on the park managers survey.

User Groups Survey

The user group survey will be looking at the size and structure of user groups; issues of funding and resourcing; the quality and condition of their individual (local) park; the level of support the group receives; and, the range of work the group is involved with. With a strong link in the selection of areas between the park managers survey and the user group survey, we secure that there is a potential for a direct comparison of results between the two surveys.

The User Groups Survey will be performed as an online questionnaire sent to relevant well defined user groups throughout Sweden. Based on data from the park managers survey, we propose that a number of user groups / organizations (as many as possible) is contacted on a local level, with primary focus on the following three domains;
a) the three main urban areas in Sweden (Stockholm, Gothenburg and Malmö),
b) municipalities within suburban areas to the three main urban areas in Sweden, and
c) municipalities which has tourism or production as their main focus.

The actual number of user groups to be included in the survey will depend on how they are individually represented within each of the three domains. User groups may be national or local groups, and they will be divided into public and private organized groups. Public user groups may include child care, schools, elderly homes, hospitals etc. Private user groups may include the Swedish

Society for Nature Conservation (Naturskyddsföreningen), Friluftsfrämjandet**,** the Swedish Union of Tenants (Hyresgästföreningen), ornithologist, joggers etc.

Public Opinions Survey

The public opinions survey will be carried out by one of the Swedish institutes, already operating with national representative studies. The three institutes we have ended up having focus on are:

GfK- *Gesellschaft für Konsumforschung*
TNS Sifo – *Svenska institutet för opinionsundersökningar*
Novus - **Novus Group International AB**

All three are major actors within this market, and all are believed to be able to carry out surveys on a national representative level.

In practice about 1,000 individual respondents are approached, randomly selected among the Swedish population above the age of 18 years. The survey is carried out as a digital survey, distributed via e-mail, and answered via the internet. Each company operates with a pre-set group of randomly selected respondents. Age, gender and region are parts of the base answers.

The standard format includes 10-12 questions, but more questions may be added (at an additional cost), and each question may have several answering possibilities. Based on the nature of these type of surveys, we may ask about the respondent's relation to their local parks, which may be defined on a regional level. This is a limitation in relation to the other two surveys, but with a coupling of answers based on the same geographical criteria as for the user group survey, we expect this to generate valid and comprehensive indications in relation to the general public use and attitudes towards their local parks. From the company, we will receive data as Excel or SPSS files, as well as a general basis report. We expect to carry out more detailed analysis ourselves. The cost for such services are around 40,000 – 70,000 SEK, depending on the amount of questions, and the complexity of answer possibilities.

Next Steps

Compiling a good evidence base on a national scale is a complex task. The difficulty is compounded by the fact that there is currently no information regularly collected in a standard format for parks and urban trees across the whole of Sweden. Past and present data is fragmented and generally of mixed and variable quality. It can be difficult to access and analyse data and has often been gathered in different and often incompatible ways using a variety of methodologies. We believe that the survey conducted in this study can serve as a future basis for similar studies, allowing us (or other researchers) to carry out longitudinal studies over time.

The project benefitted from carrying out the comprehensive study already in phase one, and thereby progressing the overall project. However, this may limit the possibility to apply for larger research funding for the two remaining parts of the study; the user survey and the user group survey. Therefore, we intend to follow up with further applications to MOVIUM.

In the next phase of this study, two new nation-wide surveys will be undertaken to build an improved and broader evidence base. This is considered to be the most cost and time effective way to understand the current condition of public parks and gain a clearer picture of the issues presently facing the sector.

Phase two will supplement the data already collected through the park managers' survey in Phase one. Phase two will be carried out based on additional external funding.

Park Managers Survey

We will analyse the collected data, and initiate publications in national trade journals as well as peer-reviewed journals. Focus will be on urban green spaces, urban tress, management perspectives and also in combination trying to encompass the entire urban ecosystem sphere.

User Group Survey

The purpose of this concise survey is to measure the general public's use of parks and to understand: how important parks are to the public's quality of life; what they consider to be the current condition of their local park; the trend in that condition; the level of concern they may have, if any, in relation to reducing local council budgets for parks; and, what they think should be the priorities for spending on parks in the future in light of this squeeze on budgets.

We will carry out the survey based on the above descriptions. Data will be weighted to the known population profile for Sweden.

Public Opinion Survey

We will together with the selected company develop the more detailed survey questions, and carry out the survey. We plan to apply MOVIUM for funding of this specific survey to be carried out during 2017.

Literature

Bretzer, Y.N. & J Selin (2014) Institutional Settings for Municipal Contracting-out in Sweden. Working paper for the research project; Innovation in the organization of public- private partnerships in an international perspective. University of Gothenburg, Department of Governmental Studies.

Bretzer, Y.N., B. Persson & T.B. Randrup (2016) Is public procurement efficiency conditioned by market types? A critical test in park and road sectors in Sweden. International Journal of Public Sector Management, Vol. 29 Iss 5 pp. 488 – 501.

Hauer R. J. and Peterson W. D. 2016. Municipal Tree Care and Management in the United States: A 2014 Urban & Community Forestry Census of Tree Activities. Special Publication 16-1, College of Natural Resources, University of Wisconsin – Stevens Point. 71 pp.

IPCC (2014) Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom & New York, NY, USA

Leiren, M.D., A.C. Lindholst, I. Solfjeld & T.B. Randrup (2016) Capability versus efficiency: contracting out park and road services in Norway", International Journal of Public Sector Management, Vol. 29 Iss 5 pp. 474 – 487.

Lindholst, AC (2009) Contracting-out in urban green-space management: Instruments, Approaches and arrangements. Urban Forestry &Urban Greening (8):257–268

McGranahan, G, P Marcotullio, X Bai, D Balk, T Braga, I Douglas, T Elmqvist, W Rees, D Satterthwaite, J Songsore, H Zlotnik, J Eades & E Ezcurra (2005) Urban Systems – Chapter 27. In:

The Millennium Ecosystem Assessment (2005), Global Assessment Reports, Vol. 1. Washington: Island Press

Neal, P et al. (2014) State of UK Public Parks. Research Report to the Heritage Lottery Fund. June 2014. Prepared by: Peter Neal Consulting, Community First Partnership, Ben Hurley Communications, Peter Harnik, Center for City Park Excellence, Dr Ed Hobson & Ipsos MORI.

Nielsen, A.B., Konijnendijk, C.C., Wiström, B., Jensen, R.B., 2013. Municipal woodland in Denmark: Resources, governance and management. Scandinavian Journal of Forest Research 28, 49-63.

Persson, B., A. Sunding & L. Johnson (2012) The green space industry – planning, design and maintenance. In: Ekelund, L., L. Johnson, S. Lundqvist, B. Persson, H. Sandin, H. Schroeder, A Sundin, I. Christensen, G. Larsson & L. Björkman (2012) Industry description: green Spaces – horticulture, outdoor environments and gardening). Swedish University of Agricultural Sciences, Omväld Alnarp, 2012. Pp. 29 – 49. [In Swedish]

Persson, B., C. Lindholst, A. Sunding, A. Kristoffersson, T. Delshammar & T.B. Randrup (2014) Quality Aspects in relation to outsourcing of green spaces – a comparative study between Sweden & Denmark. Department of Landscape Architecture, Planning and Management, Swedish University of Agricultural Sciences / MOVIUM. [In Swedish / Danish]

Randrup, T. & B. Persson (2009) Public green spaces in the Nordic countries: Development of a new strategic management regime. Urban Forestry & Urban Greening, 8(1):31-40

United Nations (2014) World Urbanization Prospects: The 2014 Revision, Highlights Department of Economic and Social Affairs, Population Division (ST/ESA/SER.A/352)