

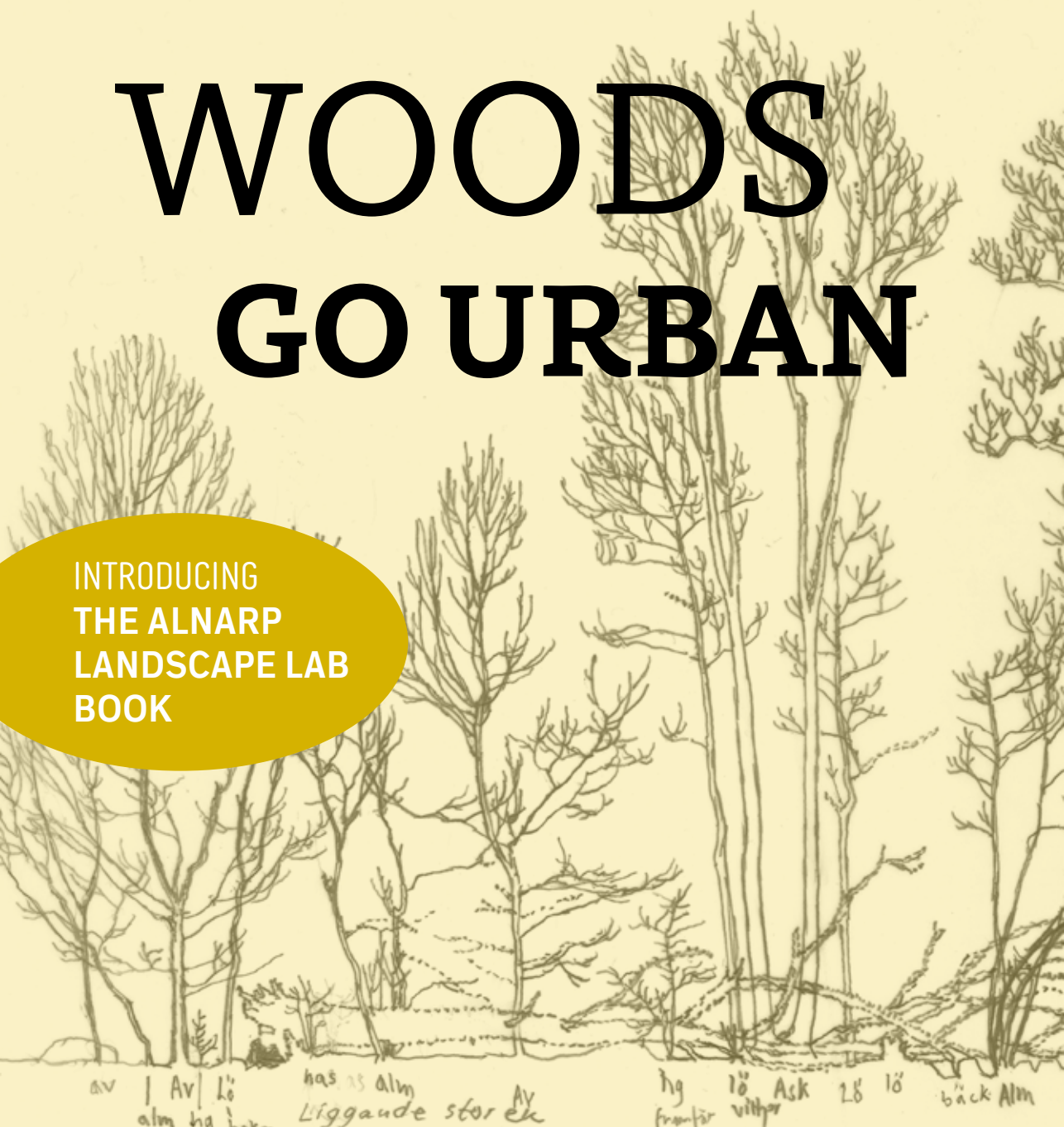
The Alnarp
Landscape Laboratory
Approach

Roland Gustavsson
Björn Wiström
Allan Gunnarsson
Anders Folkesson
Henrik Sjöman
Petra Thorpert
Stefan Darlan Boris
Dana Hladíková
Jan Šesták

Anders Busse Nielsen
Lisa Diedrich
Catherine Szanto
(editors)

WOODS GO URBAN

INTRODUCING
THE ALNARP
LANDSCAPE LAB
BOOK



blauwdruk

A photograph of a forest with many bare trees and a wooden chair in the middle ground. The trees are tall and thin, with no leaves. The ground is covered in green moss and some dry leaves. The sky is blue. A wooden chair is placed in the middle ground, facing away from the camera.

“Landscape Labs of the world, unite!”

Gustavsson’s use of the forest
as a pedagogical and design tool
resonates strongly with
our program’s commitment
to sitework and spatial ecology”

Dorothee Imbert, Professor of Landscape Architecture,
Ohio State University, USA

WOODS GO URBAN

A unique publication on the Alnarp Landscape Laboratory Approach

Urban woods currently emerge as a category of urban open space to proffer sustainability efforts for the urbanising planet under the regime of climate change. So far slipping the radar of specialists of urban transformation, urban woods have been studied in single experiments by landscape architects and urban foresters around the world, but rarely in a joint effort and over long time spans.

The Alnarp Landscape Laboratory, initiated over thirty years ago by Roland Gustavsson at the Swedish University of Agricultural Sciences' Alnarp Campus, Malmö, constitutes a pioneer of this collaborative endeavour, combining long-term scientific and hands-on designerly projects, academic education and citizen participation, yielding insight for new urban planning practices and transdisciplinary research models.

For the first time this richly illustrated and academically founded book shows to an international audience of urban actors – be they public or private authorities, practitioners, researchers, teachers, students – how the experimental urban wood in the Alnarp Landscape Laboratory has contributed to generate knowledge about an ecologically beneficial, economically viable and socially robust typology of urban open space. Readers will appreciate to immerse into the atmospheres of the urban wood along its thirty-year-long development, its seasonal appearances, its interaction with various user groups.

The authors of this book share key principles for the design and creative management of urban woods, including tools and techniques for conceiving, monitoring, teaching, researching and cocreating – a literature complement for those who study the Lab on-site, and a source of inspiration and guidance for all those who aim to engage in similar projects and processes.

**“Diving in that lovely interplay
of branch work, leaves and light
I could feel not only the scientific interest
in the landscape but also a wonderful
spirit rendering that the artificial nature
of the place has been created
by curiosity, passion and empathy”**

Frank Lohrberg, Professor of Landscape Architecture,
RWTH University Aachen, Germany

**“At Copenhagen City our current
planning and building project
of the new Byskoven City Forest
has been heavily inspired by
the Alnarp Landscape Laboratory”**

Jens Ole Juul, Urban Projects Office, Copenhagen Municipality

INTRODUCTION

**Why urban woods
now**

by Anders Busse Nielsen,
Lisa Diedrich

**The making of the
Landscape Lab**

Anders Busse Nielsen
with Roland Gustavsson and
Björn Wiström

PIONEERS

**Inspirations, Creations,
Generations**

PLACES

- Alnarp**
– the urban campus lab
- Snogeholm**
– the wood in the wood
- Sletten**
– taking the garden to the woods

STARTING

Profile diagrams

Anders Busse Nielsen
with Roland Gustavsson and
Björn Wiström

DEVELOPING

**Vegetation
structure**

Roland Gustavsson
with Björn Wiström and
Anders Busse Nielsen

UNDERSTANDING

**To design a
landscape
laboratory**

Roland Gustavsson
with Anders Busse Nielsen, Björn
Wiström, Anders Folkesson

**From design
to creative
management**

Björn Wiström
with Roland Gustavsson, Anders Busse
Nielsen, Allan Gunnarsson,
Dana Hladíková, Jan Šesták

**Including the
horticultural profile**

Henrik Sjöman
with Allan Gunnarsson, Björn Wiström,
Roland Gustavsson

**Teaching under
the sky**

Allan Gunnarsson
with Stefan Darlan Boris,
Roland Gustavsson, Petra Thorpert,
Björn Wiström, Anders Busse Nielsen

**A Laboratory
for many**

Hanna Fors
with Stefan Darlan Boris,
Helena Mellqvist, Anders Busse
Nielsen, Roland Gustavsson

OUTLOOK

**Towards
transdisciplinarity**

by Lisa Diedrich

**Bibliography
Contributors
Imprint**





















“The experiments with woodlands led by the Alnarp Landscape Lab are what I have always wanted to do: variations on textures and densities, dialogue between geometrical order and measured randomness, play with time alterations, composition of a forest en miniature ...”

Michel Desvigne, MDP Landscape Architects, Paris, France

THE MAKING OF THE LANDSCAPE LAB

Anders Busse Nielsen

with
Roland Gustavsson
Björn Wiström

The first time the concept of landscape laboratory was mentioned at the Swedish University of Agricultural Sciences in Alnarp was in a conference in 1978. The conference was future directed and brought attention to new international concepts for the parks and urban green of tomorrow. Roland Gustavsson described the idea of a landscape laboratory with a reference to a landscape laboratory in California, USA, which was never fully realized. After the presentation Mårten Carlsson, the Vice Chancellor of the Swedish University of Agricultural Sciences suddenly entered Roland Gustavssons' room, and said: "When you were speaking of landscape laboratory today, I am pretty sure that you don't really understand how big it can become". Beginning with this conference, the laboratory thinking has step by step been integrated as part of the campus landscape in a dialogue with the natural and cultural legacy of the place.

Today the Landscape Laboratory at the Alnarp campus of the Swedish University of Agricultural Sciences is an essential part of the campus' green infrastructure. Located right at the doorstep of the indoor studios, lecture halls, offices and, not the least, laboratories with pipettes, petri dishes, microscopes etc., it is a full-scale platform for research, demonstration and teaching, many other universities lack and admire. Furthermore, as the Alnarp campus is nestled in a area of agricultural fields between the suburbs of Malmö and Lund and close to the strait between Denmark and Sweden - almost within viewing distance of Denmark's capital, Copenhagen - the Landscape Laboratory acts as a green core in the otherwise chaotic urban fringe landscape, and as such constitutes an important part of the green infrastructure in this urbanised region.

The chapters that follow will discuss some of the issues that were raised as part of the landscape laboratories. Some issues were important at the beginning, some arose later, some were present throughout, and some new ones are being raised today. While Roland Gustavsson was the leading force throughout these years, the history of the landscape laboratories is the history of a team's work. The group changed over time, some older members retired, some younger teachers and students joined, some people were supportive in the background and others involved day to day - yet the team retained its coherence, keeping the adventure of the landscape laboratory concept as its focus. Each chapter is written not by one author but by a group, each different and made of those most closely involved in the discussed theme. The role of some of those involved is mentioned when relevant.

In this first chapter, we will discuss some of the issues that set the framework at the beginning or very early on in the development of the Landscape Laboratory in Alnarp, and of course, issues that have become the hallmark of the landscape laboratory approach. Some of these points will be further developed in the following chapters.

Landscape and Laboratory

The landscape cannot be moved to a laboratory for study. Rather the laboratory thinking needs to be conveyed to the landscape. "Landscape laboratory" is a new concept that combines in one and the same location what is unique (the specific landscape) and the possibility to engage in long-term experiments studies of specific environmental issues (the laboratory thinking). And it is a laboratory that integrates the individualized and aesthetic dimension of a landscape architectural approach.

The landscape laboratory has literally become "a space deliberately created to speed up or slow down the process of nature", as landscape in general was defined in 1984 by one of the founding fathers of American Landscape studies, John Brinckerhoff Jackson. International experts continue to consider this definition of landscape innovative even today. That is not the least because it focuses on the actions of making landscapes in time and space. It is such actions that are invented and researched in Alnarp. It is adapted to explore urban woodlands, since, in contrast with forestry field trial station or nature reserves, it combines complementary research in ecological quality and aesthetics. While field trial stations often focus on providing empirically substantiated evidence of statistically valid statement, the landscape laboratory gives room to in-depth studies of the site-specific and the context as a way to identify innovative new concepts and 'prototypes'.

Some general principles

The woodland landscape in the landscape laboratory does not stand in opposition to forestry, the open countryside or park and other types of urban green spaces. Rather, the terms 'wood' and 'woodland' are used in the widest sense, including park styles, the farmer's dense woods of coppice, or the open woodlands of grazing which were important parts of the landscape in earlier centuries. And it includes brand new and innovative small scale landscapes combining a variety of design and management intensities, so that the Landscape laboratory can be a showcase for woods in an urbanized society.

The aim of the landscape laboratory is to be a conservatory as well as a laboratory. Our focus is on conserving as much as creating landscapes, in actions where design is not separated from management.

We want to convey that the landscape laboratory delivers evidence that these two cannot be separated but come together in a new understanding of ‘evolutionary’ design. In conventional design processes, design and management often are divided between people as well as divided in time. Designers draw a comprehensive plan before construction or implementation starts. After completion the area is handed over to the management staff with instructions for ‘maintenance’; that means ‘maintain’ something. This linear and static approach, where design and management are separated, has made a desire to ‘press the fast-forward button’ dominant in the urban open space agenda. People today desire outdoor environments that are ‘finished’ as soon as possible. While this is not a new phenomenon the capacity and phot-realism of contemporary architectural renderings and construction technologies probably enhanced the illusion of sudden ‘maturity’ that makes it seem as possible.

As will be unfolded in the following chapters, we developed in the landscape laboratories an evolutionary approach that takes a clear position against this design approach. For us, the making of urban woods – understood in the widest sense - is an evolutionary process, where design is not separated from management: management does not simply follow design. Rather we consider it as design put into a time continuum. After all, plant communities evolve in a time continuum, one generation of trees grow up the next follows, or several generations living side by side together.

Such an approach allowed us to focus on the advantages of “new-born” and “teenage” woods and explore the young and intermediate phases as ‘phases of opportunities’ rather than ‘phases of waiting’ for the trees to mature – or, indeed, for the entire design to mature.

Time-based approaches to design are certainly also found in contemporary landscape architecture (e.g. Grosse-Bächle 2005, Kereval 2017). For example, the internationally known French landscape architect Michel Desvigne’s projects are often characterized by ‘the power of abundance’, achieved by vast vegetal structures made of densely planted trees, emphasizing the early phase and highlighting successive phases through the coexistence of concentrated, condensed stages of development (Tiberghien, G.A., Corner, J., 2008). The landscape laboratory adds to the work of such skilled practitioners as a 1:1 platform, where aspects of vegetation design and management of principle interest are highlighted, developed, documented and opened up for discussion through situated and design-oriented interactions. In this way, the Alnarp landscape laboratory and the

others in the Scandinavian network of landscape laboratories, have a crucial role to play as didactic arenas, which allow for a reflexive landscape approach that – contrary to a normative approach – includes the subject (i.e. the researcher, teacher and student) as active agents in practice-oriented learning-by-doing processes. These learning processes focus on an improved understanding of the traditional design and management practices that have served us for decades, in combination with test of innovative and brand new concepts, respecting and giving place for the unpredictable. The learning-by-doing approach also means that the landscape laboratory is dependent on “thick descriptions”, so there are - together with the embodied and personalized knowledge of us “insiders” - facts and stories to be told; many of which we tell in this book.

Roots

References to the concept of landscape laboratory can be traced all the way down to the Humboldt brothers. Wilhelm von Humboldt, (1767 – 1835), who is often called the father of modern pedagogy, introduced the two academic words “laboratory” and “seminar”. As the founder of the first university in Berlin that now bears his name, he was concerned about the lack of contact and interaction between different scientific disciplines. His brother Alexander von Humboldt was one of the first practitioners of what was to become biogeography. Like Carl von Linné in Sweden, he was interested in the indigenous (local and regional) world, as well as the exotic one. Similarly to his brother, he sought to unify diverse branches of scientific knowledge and culture.

These ideas suit very well the idea of a landscape laboratory within the globalized society of today. The Humboldt brothers may not have been thinking in particular of outdoor laboratories, but, no doubt, the landscape laboratory is an outdoor arena where different disciplines meet. We see it as both a biophysical entity and a cultural phenomenon in the meeting between disciplines, research and practice, general and contextual knowledge.

The pre-history

The dynamic interplay between natural processes and designed management interventions that is so characteristic for the landscape laboratory was developed through years of preparatory studies, where important experiences were gained for the then young research team.

The observation of such dynamic interplay started through a very personal process. Ove Gustavsson, Roland’s father, was the head of the only regional forestry school located in the mixed broad-leaved

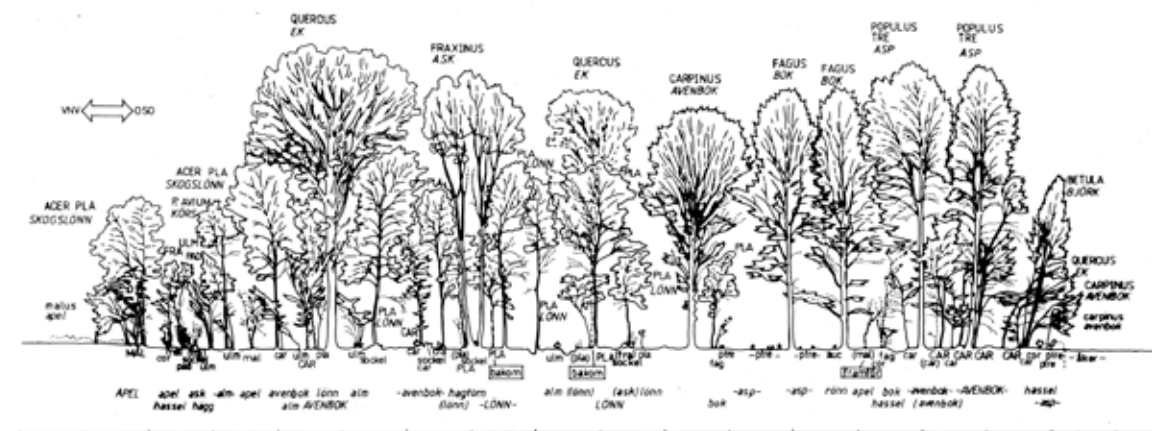
forests zone of Sweden, in Sjöarp, Blekinge. As the head of the school for more than fifty years, he systematically annotated the stages and management operations in the forest from the 1930s right up to the 1980s. In his doctoral work (Gustavsson 1986), Roland Gustavsson had the opportunity to gain a deep understanding of woodland stand structures and their dynamics by following the tracks and notes of his father. But he did more than reconstructing. He started to draw profile diagrams that rendered the the spatial aspects of vegetation structure visible as a method to link the theoretical fields of forestry, ecology and landscape architecture. As will be unfolded in chapter 2, Roland Gustavsson drew the first profile diagram in one of his childhood forests during the spring of 1974. During the years we have teamed up with Roland Gustavsson to measure, draw, map, photographing, and conduct interviews in many other landscapes. The profile diagram methods been key to widen our understanding of wooded landscapes in different phases of development, from wilderness, granite forests, groves, hedges, wooded meadow types, and grazed landscapes with their coppices and open woodland types, to parks, arboreta, buffer zones along traffic roads, and play areas within cities. We have not only visited the reference landscapes. The actions on site has been the means to make them personal and embodied landscapes as much as they have been means to document and to disseminate the ideas in articles, reports and books. Many have become important reference landscapes for the Landscape Laboratory.

Using the profile diagrams, Roland Gustavsson developed a structural approach where woodland stands – understood in the widest sense – were classified into different structural types based on the vertical and horizontal distribution of tree crowns and species. As will be described in chapter 3, the structural approach acted as a ‘translator’ between ecology, architecture and forestry; between analyzing, proposing and prototyping; and between moments in time and development over time. The structural approach opened up possibilities to identify different types of woodland stands as alternative ‘prototypes’ to the even-aged monoculture plantations that prevailed in forestry as well as urban green spaces during the late modernism.

Funding from Swedish research councils made it possible to test the prototypes in collaboration with - in particular - South and Mid-Swedish park departments and landscape architectural offices. In these intervention studies the aim was to identify interesting new approaches in a site specific context and then take the lead in evaluation. During eight years from the late 1970s to the early 1980s wooded areas planted in parks, housing areas, traffic green and city nature were part of these intervention studies. From these experiences - successes as well as failures - grew a strong wish to build up a home



Roland identified a transect from the western to the eastern edge of Gulsippplunden that captured the structural differences from complex and species-rich to simple and species poor, and moreover, including an old remarkable *Quercus robur*. This particular *Quercus* had been bordering a former glade for hay making where people celebrated the arrival of spring as a ceremony. In 1982 the coverage of foliage and its distribution across the tree layer, lower tree layer, middle layer and shrub layer were mapped in a 12,5 meter wide transect. The profile diagram establish a vertical section of the two meters along the transects centerline. Dotted lines indicate dead branches, providing essential information in judging vitality and predicting crown architecture. Profile and crown projection by Roland Gustavsson (Gustavsson 1986)



arena, a landscape laboratory.

The timing was right

As a concept and project, Alnarp Landscape Laboratory was well timed, with multiple-use forestry theories that gained footing in the Scandinavian countries during the 1970s and 1980s, as a way to bridge the gap between the culture of rural and urban values and people (Hytönen (ed.) 1995). It was also well timed with the growing awareness of biodiversity concerns in the agricultural sector, being part of an increasing environmental interest of ecologically sound landscape design and management. Ian McHarg's famous book *Design by Nature* from 1969, is by many considered a farewell to modernism and its green spaces with large interspatial areas of lawns and wooded areas with low structural and species diversity. At the end of the 1970s ideas for 'ecological approaches to landscape design' and nature-like plantations gained momentum among practitioners and academics in many North European countries, like Denmark, Germany, the Netherlands, Sweden and the UK (Forbes et al. 1997, Ruff 2002 Thompson 1998, Tregay 1986).

For several years, Roland Gustavsson was working part-time for the Swedish Forest Agency, giving seminars on aesthetics and design methods together with Torleif Ingelög, the founder of the new department of flora and fauna at the Swedish University of Agricultural Sciences. The courses and seminars were developed into a book "The New Landscape", (Gustavsson & Ingelög 1994). In this book many of the concepts that were detected and tested as prototypes in the landscape laboratories (see also chapter 4) were proposed. The potential to contribute to 'building up' these knowledge fields further, opened up for national, regional and university support and funding to initiate the Landscape Laboratory in Alnarp.

Alnarp landscape laboratory was actually not the first of its kind in Sweden, but it was the first to become a success. During the years following the Second World War, where Sweden experienced a first wave of urbanisation, the landscape architect Sven Hermelin, at the time the main teacher of landscape architecture at Alnarp, and Folke Thörn, forester and the first 'mega-star' in orienteering in Sweden, came up with the idea of a multidisciplinary landscape laboratory, which they even called "landscape laboratory" (Andersson 2000). They chose a site in Järna, south of Stockholm, a place known for its school in anthroposophical architecture by Steiner and Waldorf pedagogy. It also happened to be the place where one of the upcoming landscape architects, Magnus Johnson, who was inspired by the concept of plant communities and had coined the term "wild flora" for

domestic gardening, was living and had just started a nursery. Magnus also supported the landscape laboratory. However, after only ten years, the landscape laboratory was closed down. Maybe the failure of the Californian and Järna landscape laboratories refer to other time perspectives: it takes time before ideas settle in society, and thus timing is important for their acceptance and success.

Step by step

When the Swedish University of Agricultural Sciences (SLU) decided to implement the landscape laboratory concept, landscape architecture and planning were given the key role, but the involvement of other disciplines such as agriculture, forestry, horticulture, art, and ecology was equally important in a common search for innovative approaches. Hans Lindén, the director of the Landscape department of the university challenged the original team to "Start small, and convince us. If you follow my advice I am sure it will become very large." And that is how it became. Alnarp Landscape Laboratory has come into being in steps, and indeed the step-wise development in space and time has helped in developing a clear spatial frame for focusing each step on different typologies or 'urban woods', each of which has responded to local and often very tangible needs. Today, thanks to this step-wise development, visitors can experience 'travelling in time' when walking from the old campus park into the different parts of the Landscape Laboratory with varying age.

Step 1: Windbreak and filter plantations with interior

Klaus Vollbrecht Park was established in 1981, named after the head of the management unit for the old campus park and its arboretum. Being a practical man, he was inspired by the structural approach, and when a new campus district with indoor laboratories and lecture halls needed a landscape frame and shelter against the persistent and often strong western winds from strait, he approached Roland Gustavsson. Roland used the opportunity to expand the shelter planting into a woodland belt where it would be possible to study nurse tree species' potentials for rendering spatial, structural and morphological qualities during the young phases of development. Furthermore, the idea was to propose a woodland belt that was not only to be observed from outside, but would invite people inside. The idea of offering interior room for recreation motivated successive design interventions, combining woodland gardens along an interior path within the 'wild' frame. As such, Klaus Vollbrecht Park demonstrates and stimulate discussion about the potential of inviting citizens into the thousands of kilometres windbreak and filter plantations found in city context

Alnarp – the urban campus lab

PROGRAMME

Campus woodland as test site for composition and evolution of urban woodlands and for outdoor pedagogy

LOCATION

Alnarp Campus, Swedish University of Agricultural Sciences (SLU), situated between Malmö and Lund in the Öresund metropolitan region

COMMISSIONED BY

Swedish University of Agricultural Sciences (SLU)

FOUNDER AND MAIN DESIGNER 1985-2014
Roland Gustavsson

MASTERPLAN

Anders Folkesson

PLANT DESIGNERS 1985-2014

Roland Gustavsson, Kenneth Lorentzon, Magnus Svensson and Henrik Sjöman

COORDINATORS SINCE

2005-2014
Anders Busse Nielsen

SINCE 2014-2018
Allan Gunnarson

SINCE AUTUMN 2018
Björn Wiström

MANAGER SINCE 2008
Erik Svensson

COLLABORATORS

Björn Wiström, Hanna Fors, Emma Holmström, Jitka Svensson, Dana Hvladikova, Jan Sestak, Linn Gustavsson, Fredrik Stridh, and other researchers of the Swedish University of Agricultural Sciences (SLU), many students

SUPPORTED BY

SLU strategic funds; regional environment grants; grants of different Swedish

research councils (Byggeforskningsrådet, Formas)

AREA
40 ha

DESIGN
since 1978, ongoing

IMPLEMENTATION since 1978, ongoing (Klaus Vollbrecht Park 1983; Tor Nitzelius Park 1985; Västerskog 1993-1994 and 1998)

BUDGET N/A



Tor Nitzelius Park, planted in 1984-1985, also took advantages of the need for a new woodland belt. This time it was the arrival of the Dutch elm disease that became a strong motive for new plantings. The die-back of elms gradually made smaller and bigger scars and openings in the old shelter planting along the western rims of the campus park, exposing the valuable collection of trees and shrubs to the persistent western winds. Again Roland Gustavsson turned it into an opportunity to create a lab and to add a new recreational area to the campus. Named after the most famous Swedish dendrologist, who introduced numerous exotic trees and shrubs to Sweden and advocated their use, the design for Tor Nitzelius Park re-invented the arboretum as a concept, turning it into a 'woodland park'. Exotic species traditionally used as solitary ornamentals were planted in woodland systems inspired by their native habitats. All main structural types of woodland stands were planted side by side to facilitate comparison between native and exotic species and across a 'complexity ladder' of monocultures, simple mixtures of 2-4 species and complex species rich mixtures. This basic structure has gradually been enriched by selective thinning and adding to the understory and introduction of true woodland field layers. These new waves of plantings focused again on both exotics and natives side by side, in the spirit of Tor Nitzelius.

Step 2: Addressing urban fringe afforestation - Alnarp's Västerskog

In the 1980s, there was a growing concern about the massive overproduction of agricultural products in Europe, and an increasing awareness of the environmental effects of intensive agriculture. Afforestation was voiced as a mean to tackle these issues, especially in the forest-poor and intensively farmed North-western European countries, including the southern tip of Sweden where Alnarp is located. At the same time there was a growing recognition of multiple use forestry. Afforestation in the proximity of urban areas soon became a clear and consistent political priority, due to the added values of recreational areas for the increasing urban societies and enhanced nature values (e.g. Kirkebæk 2002, Nielsen and Jensen 2007). Alnarp's Västerskog ("western wood" in Swedish) came into being in response to these emerging political concerns, with a focus on multiple-use afforestation in the urban fringe context. It was established in two steps, 1994 and 1998, and expanded the landscape laboratory into the university's agricultural fields on the western side of the railway.

Step 3: Species from Far East - Magnolia woodland and China Field

The most recent addition to the Landscape Laboratory is the Magnolia woodland. The plants grown are crossings made by members of the Magnolia group, using among other material from their ventures in Central China, one of the regions in the world with the richest variety of tree species. In Scandinavia Magnolias are generally used as

solitaires, placed as focal points in parks and gardens. In Alnarp the use of Magnolias was turned into a new physical format that mimics the natural habitat of Magnolias. A woodland where they are planted together as a herd with sheltering nurse trees of *Larix* and for the long run, *Metasequoia* and *Quercus* as stabilizing standards. It is the largest and the most genetically diverse Magnolia plantation in Sweden. The China Field is also planted with specimens grown from seeds collected by the group on their ventures to central China. Among these are species not yet tested in Scandinavia as well as new genotypes of known species. Some of these might be useful in the future changed climate or simply because of ornamental values – which in fact has been the main driver for past plant hunters.

The Magnolia woodland and the China Field lie on both sides of the access road to the campus. The road is framed by an experimental avenue planting. The design is a full-scale test of alternatives to the classical formal avenue, which is vulnerable. In Alnarp the avenue is formal while at the same time informal, regular and irregular. The one side was planted in 1990 as a formal line of *Fraxinus excelsior* with spacing decreasing from 12 to 6 and finally 3 meters as the road approaches the campus. The other side was planted in 2002 with *Quercus robur* in punctuating tree clumps with a hedge of *Carpinus betulus* to emphasize the linearity of the space. Its simultaneously regular and irregular spatial composition makes the allée very adaptable and resilient.

A network of Scandinavian landscape laboratories

Alnarp Landscape Laboratory created interest, which led to the establishment of two other Scandinavian landscape laboratories. The focus for this first generation of landscape laboratories in Scandinavia is the urban-rural fringe situations, where rapid land-use changes too often result in chaotic mixtures that can be aptly called classic non-places that lack identity (Gant, 2011). The three landscape laboratories represent different situations along the urban-rural gradient, giving each of them their own context and identity. Parallel their design has overlaps that allows for repetitions and comparisons.

The second landscape laboratory was established at Snogeholm in 1994, parallel to Alnarp's Västerskog. It was located in the rural hinterland between the towns of Ystad and Sjöbo, in Southern Sweden. It explores the potential of afforestation in a formerly agricultural land, with plots planted with different species combination, and looks at the dynamics of strand structure over time and at the spatial potential of each combination.

Snogeholm – the wood in the wood

LOCATION

Scania, Southern Sweden

DESIGNERS AND COORDINATORS

Roland Gustavsson, Pelle Gemmel, Anders Folkesson

IN COLLABORATION WITH

Southern Swedish Forest Research Centre and the landscape departments at the Swedish University of Agricultural Sciences and the Scanian Landscape Foundation

COMMISSIONED BY

The region council of Scania and Swedish University of Agricultural Sciences

AREA

30 hectares

DESIGN PERIOD

1993

IMPLEMENTATION PERIOD

1993-1994

LABORATION PERIOD

Ongoing since 1994

SNOGEHOLM'S LANDSCAPE LAB IS A TRANSFORMED CROP FIELD SITUATED WITHIN A WOODLAND AREA AND OFFERS A RECREATIONAL HUB IN THE OTHERWISE PREDOMINANTLY AGRICULTURAL LANDSCAPE OF SOUTHERN SCANIA.



SNOGEHOLM AS SEEN FROM THE AIR

67 DIFFERENT COMPLEXITIES OF SPECIES WITHIN THE TREE STANDS AND ALONG THE STANDS' EDGES CHARACTERIZE SNOGEHOLM.



Sletten – taking the garden to the woods

DESIGNER
Roland Gustavsson

PROJECT START
1999 (housing development finished in 2004)

LOCATION
Holstebro, Denmark

TOTAL AREA
160 ha

WOODLAND AREA
30 ha

COMMISSIONED BY
The Swedish University of Agricultural Sciences and Holstebro Municipality

INFRASTRUCTURE DESIGN
Carl-Aage Sørensen

BUDGET N/A

PLAN OF SLETTEN'S LANDSCAPE LABORATORY. THE FOREST VILLAGES ARE SURROUNDED BY VARIED WOODLAND PLANTINGS. THE COLOURED FIELDS CORRESPOND TO THE 52 DIFFERENT VEGETATION TYPES.



INSPIRED BY THE ALLOTMENT GARDEN MOVEMENT, ANOTHER FAMILY AT THE SLETTEN LANDSCAPE LABORATORY DECIDED TO CREATE AN ENCLOSED GARDEN IN THE FOREST AND ESTABLISHED BOTH A FLOWER GARDEN AND A KITCHEN GARDEN. THIS PARTICULAR AREA IS EXEMPLARY IN THE WAY MANY INHABITANTS OF SLETTEN INTERACT WITH THE FOREST AND EVENTUALLY ENTER INTO A DIALOGUE WITH EACH OTHER AND WITH THE NATURAL PROCESSES OF THE FOREST.
PHOTO COLLAGE: STEFAN DARLAN BORIS



The third landscape laboratory was established between 1999 and 2004 at **Sletten**, a large new residential development in the town of Holstebro in Denmark. What distinguishes Sletten from the other landscape laboratories is the direct bonds to the city expansion, and in that connection, the direct relationship between new woodland and new housing units, and thus direct relationship with local residents. Today the Sletten Landscape Laboratory experiments with residents' involvement in the ongoing shaping and management of the woodland.

The landscape laboratory is far from the only approach and 'tool' we can use when striving to refine our understanding of the potentials of woods, and how to use this creatively and wisely in our urbanized societies. However, we have learned that it is a useful one; both as a biophysical entity with a physical form, and as a phenomenon, a mindscape, to be experienced by us human beings. During all these years several hundred groups of professionals, students and researchers, from SLU, from Sweden, from Denmark and from other countries, have been guided in the landscape laboratories (e.g. Nielsen 2011). Our experience as guides and supervisors is that the landscape laboratory moves discussions away from how urban woods – in the widest sense – 'should look like' to how they 'could look like' in the future. Similarly, from what the role of design and management 'should be' to what they jointly 'could mean'. These fundamental – and in fact time-independent – reflections were in fact the very reason why Roland Gustavsson introduced the idea of a landscape laboratory at the conference in 1978.

Björn Wiström
with
Roland Gustavsson
Anders Busse Nielsen
Allan Gunnarsson
Dana Hladíková
Jan Šesták

FROM THE DESIGN TO CREATIVE MANAGEMENT

One of the most problematic things in contemporary practice of design and management of a landscape is the articulating of its features through development. Management often is reduced to an activity that occurs after the design has been established. The absence of an active, creative management often leads to standardised, simplified landscape. What could have become something special, articulated, rich in biodiversity and cultural identity, and developed into a most wonderful landscape when grown up, is too often already destroyed in the teenage phase. These lines were written in 2002, at the time the landscape laboratory was well established, but could easily turn into another lean and anonymous teenage 'wood', searching for identity. Not having reached maturity, it was however also highly flexible and responsive to interventions, leaving a 'creative window' open. Rather than redrawing, design was stressed – in the management phase.

Emphasizing aesthetic issues

Creativity is about aesthetics. But creativity is also about something more focused, like how to reach a 100% productivity for food or wood, or how to reach an optimum in species-richness of flora and fauna. These issues are important as part of a creative management process for the agricultural or forestry sector. But in the context of urban fringe the term creative management is used with a view of multiple interest. Here the aesthetics is emphasized, with the focus on attractiveness, harmony and disharmony, vitality, rhythm, focus points and seasonal highpoints such as the outspring in the spring period, the flowering in the summer period, and the autumn colours. And here many other aspects are involved, such as readability, understanding and identity. A creative management emphasizing the aesthetics is about potentials for personal integration, involvement and engagement, about symbolism and history, cultural roots, nostalgic, feelings of welcome, trust and security.

The birth of Creative management

At a certain moment the tree stands, the meadows and the small water bodies in the landscape laboratory had left their establishment phase and were on their way to an early teenage phase. It was time to open up the landscape with additional path systems and special places where the design eye became essential. The term creative management was introduced to demonstrate the value of field-based and hands-on practices where the dynamics of the plants themselves was used.

Young professionals of different professions, such as landscape architecture, art, horticulture, forestry, landscape engineering, and

ecology were invited to a series of short-term projects. The university had in this period strategic money to stimulate new research areas, which resulted in a three years project (2004 – 2007) called Young professionals express themselves in a young landscape through creative management. Their task was to create places, micro-places and walks by articulating - often by carving out - spatial, structural and morphological qualities 'hidden' in the evolving vegetation. And they did that almost entirely by reduction, removal and sculpturing of vegetation, what is traditional seen as management operations, but now considered as acts of design and place making.

Creating place and leaving room

Creative management is also about where to intervene, where not and where to give strength to a place by surrounding it with no-places, or in between spaces. Where to be more conventional and economy-lead in traditional forest operations, as well as where to be more specific and place based.

The creative manager is a composer that arches over the domain of different knowledge cultures, from the detailing of gardening to the rationality of forestry and the understanding of wilderness and natural processes of ecology. Whereas traditional management usually targets the stand, the nature type or the biotope as its management unit, a creative management needs to work across scales. The interventions in the place are in close dialogue with the larger scale, and, parallel, find the details and the micro levels as part of the place. These are nestled within the rough script of the overall landscape design and the overall management, where the movement through the lab choreographed by the path systems sets the viewing lens that brings the different elements of the landscape together.

Framework for creative management in Alnarps Västerskog

In Alnarps Västerskog the creative management is composed as pearls on a neckless, the neckless being the path system. The varied length of passages is essential to the flow of experience, just as passages of crescendo and diminuendo are essential to a piece of music. The passages are provided by the matrix which is managed along classical forest principles, or by a wish to let it go into wilderness without management. Here focus is on the long-term development at stand level. So are most of the created places and walks, but some of them are there to illustrate qualities that are meant to be there for just short periods and then disappear and maybe be replaced by new qualities that are created..

(..)



LINN'S PLACE. YOUNG ARTISTS AND LANDSCAPE ARCHITECTS EXPRESS THEMSELVES IN A YOUNGLANDSCAPE. A THREE YEARS SUMMERTIME PROJECT AT ALNARP'S LANDSCAPE LABORATORY 2004-2007.





LINN GUSTAVSSON 2004:
 'I LIKE TRAVELLING IN THE
 WORLD, AND EVERY TIME I
 COME HOME TO MALMÖ I MISS
 THE MOUNTAIN LANDSCAPES
 WITH THEIR MOUNTAINTOPS,

STEEP SLOPES AND TERRACES,
 IN WHICH PEOPLE LIVE AND
 CULTIVATE. I WISH TO CREATE
 AN ILLUSION OF THESE MOUN-
 TAIN LANDSCAPES BY MAKING
 A MINIATURE LANDSCAPE AT

A CHOSEN PLACE HERE. AND
 IF PEOPLE WISH TO INTERPRET
 IT DIFFERENTLY IT IS FINE
 FOR ME.'



Linn's place today. Sublime, framed by the
 beechhalls and their thousands of stems



About the authors and other contributors

STEFAN DARLAN BORIS

Stefan Darlan Boris is associate professor (PhD MDL) in landscape architecture at the Aarhus School of Architecture. He is currently working on a research based and artistically driven project in the Aarhus River Catchment Area addressing the challenges and potentials confronting landscape architecture and urban planning due to urbanization and anthropogenic processes. Together with a cross-disciplinary group of researchers and urban planners he is responsible for the development of the Aarhus Landscape Laboratory on Eskelund, which is a cross-disciplinary platform for research and education, aiming to rethink and experiment in 1:1 how to develop and communicate new types of urban nature.

LISA DIEDRICH

Lisa Diedrich studied architecture in Paris, urbanism in Stuttgart, and landscape architecture at the University of Copenhagen, where she received her doctoral degree. She currently works as a professor of landscape architecture at SLU Alnarp, where she also directs the research platform SLU Urban Futures. Her main areas of research encompass fieldwork methodology for fragile sites, site-responsive design for post-industrial urban landscapes, and trans-disciplinary approaches to study critical urbanities in the Global North and South. She is the editor-in-chief of the book series Landscape Architecture Europe and co-editor-in-chief of 'scape the international magazine for landscape architecture and urbanism.

ANDERS FOLKESSON

Anders Folkesson is a landscape architect, senior lecturer and leader of the subject area of Urban Vegetation at the Department of Landscape Architecture, Planning and Management, SLU. Folkesson is also running his own landscape architecture office. From 1993 to 1997 he was responsible for designing the landscape lab in Alnarp and in Snogeholm, led by Roland Gustavsson. This design work is documented in the booklet Att forma ett rikare landskap, published by Movium, SLU, in 1996. From 2014 to 2018, Folkesson has worked as a member of the Alnarp Landscape Laboratory team.

HANNA FORS

Hanna Fors is a landscape architect and researcher working in the field of user participation in public urban green space management at the Department of Landscape Architecture, Planning and Management, SLU. The main part of her doctoral thesis built on a seven-year case study of the Sletten landscape laboratory, where local residents participated in the management of the public urban woodland bordering their gardens. There, she studied local residents' drivers for engaging in the woodland management and how their participation affected the quality of the public urban woodland.

ALLAN GUNNARSSON

Allan Gunnarsson has been a professor in garden design and landscape management at the University of Gothenburg and a senior lecturer in vegetation construction and park management at SLU Alnarp. As a teacher he has focussed on garden-, park- and landscape management as well as on planning and biotope design, with a special interest in outdoor learning and learning-by-doing approaches. His research covers garden- and cultural landscape history, use and management, vegetation design and the relation between humans and trees.

ROLAND GUSTAVSSON

Roland Gustavsson completed his PhD in 1987, became professor at SLU in 1994, since 2015 professor emeritus. In 2016 he worked as a guest professor at Ohio State University, USA. Since 1976 he has been engaged in research and teaching at SLU Alnarp's Department of Landscape Architecture, Planning and Management, with the intention to bridge between academia and practice. His work significantly emphasises vegetation as a tool for landscape architecture, green infrastructure and planting design. His main areas of interest encompass embodied and outdoor learning, landscape dynamics, landscape management, biotope and structural design, landscape laboratories, environmental aesthetics, and aesthetics of engagement.

DANA HLADÍKOVÁ

Dana Hladíková completed her landscape architecture master studies at Mendel University of Agriculture and Forestry in Brno, Czech Republic, in 2003. She has been a coworker on the Creative Management project for Roland Gustavsson at SLU from 2002 to 2005 and she has joined the Czech National Heritage Institute as a referee for historical gardens in the north bohemian region of Ústí nad Labem in 2006. In 2014 she co-founded a forest kindergarden with Jan Šesták.

HELENA MELLQVIST

Helena Mellqvist is a landscape architect who is just as interested in people as in landscape. During the past 15 years, she has developed great interest and knowledge in fostering dialogue between people with different backgrounds and perspectives using the landscape as a shared basis. In 2017, she finalised her doctoral thesis entitled 'The connoisseur method – A study on long-term participation in landscape planning'.

ANDERS BUSSE NIELSEN

Anders Busse Nielsen is credited for his hands-on approach to interdisciplinary research. As professor in Landscape architecture at both SLU Alnarp and University of Copenhagen he has assembled a research philosophy that pursues new and encouraging interactions among urban ecology, forestry and landscape architecture. Parallel, he has worked as an independent landscape architect under the name of LANDFORCE. In 2019, he changed career to fill the position as project leader for afforestation in the Danish Nature Agency, from which he now has direct impact on the planning, design and management of new urban woodlands in Denmark.

JAN ŠESTÁK

Jan Šesták completed his landscape architecture master studies at Mendel University of Agriculture and Forestry in Brno, Czech Republic, in 2003. He has been a coworker on the Creative Management project for Roland Gustavsson at SLU from 2002 to 2005 before undertaking PhD studies at the Czech University of Life Sciences in Prague from 2005 to 2007, where he established a new educational program in urban forestry and urban greening at the Forestry Faculty. Since 2008 he is running his office, designing and constructing gardens, parks and public spaces. In 2014 he co-founded a forest kindergarden with Dana Hladíková.

HENRIK SJÖMAN

Henrik Sjöman is working as a senior researcher at SLU and as scientific curator at Gothenburg Botanical Garden. His is mainly focusing on developing knowledge of site adapted plant use for urban environments. How the capacity of different plants will vary in context to its environment and in delivering ecosystem services has become the prime driver in Sjöman's work and as such how to extend the knowledge of diversifying public greeneries.

CATHERINE SZANTO

Catherine Szanto is a landscape architect, holds a master in landscape architecture from Cornell University (USA) and a PhD from Université Paris VIII (France), where she studied the experience of walking in the gardens of Versailles. She worked in France for several design firms on projects and studies in both urban and rural settings, where the issue of heritage was important. She is now teaching at the School of Architecture of Paris-La Villette and the School of Landscape Architecture at INSA-Blois in France, and pursuing research on the aesthetics of landscape perception.

PETRA THORPERT

Petra Thorpert holds a PhD in landscape architecture and teaches landscape design at bachelor and master levels at the Department of Landscape Architecture, Planning and Management, SLU, Sweden. Both teaching and research projects focus on perception of landscape and its relationship to landscape aesthetics and human health. Part of her doctoral thesis is built on studies performed in the Landscape Laboratory at Alnarp Campus, exploring colour influences on human perception and related experiences.

BJÖRN WISTRÖM

Björn Wiström is a researcher and landscape architect with a PhD in landscape planning. He teaches and researches about urban forestry, vegetation design and landscape management with a special focus on the link between design and management at SLU. Since 2008 he has been involved in the making and monitoring of landscape laboratories in Scandinavia, and since autumn 2018 he is the coordinator of the Alnarp Landscape Laboratory.

DAPHNE DE BRUIJN

Daphne de Bruijn is graphic designer. She studied graphic design at Utrecht School of the Arts and works for Blauwdruk Publishers on books and magazines in the field of landscape, urbanism and design. She works in close interaction with editors and authors to translate content into attractive products. She has been the designer of the Landscape Architecture Europe series since its inception. LAE#3 received an award as best book on architecture on the international book fair of Frankfurt.

SARA BUTLER

Sara Butler was born in Hampton Court (United Kingdom), studied anthropology at the University of London. A freelance writer, editor and translator based in the Netherlands since 1988, she specialises in making academic and scientific subjects accessible to a broad readership. Sara has been the language consultant and copy editor for Blauwdruk for many years. She is copy editor of the Landscape Architecture Europe series since the second edition.

HARRY HARSEMA

Harry Harsema studied landscape architecture at Wageningen University and graduated in 1985. Since then he has worked as a journalist, editor and graphic designer in the field of landscape and architecture. He was founder, editor-in-chief and is now publisher of the Dutch magazine *Blauwe Kamer* and the Dutch Yearbook for landscape architecture and urban design, and is editor-in-chief of 'scape magazine. In 1994 he founded Blauwdruk Publishers, which specializes in books on landscape architecture, urban design, art and cultural heritage.

Woods go urban is made by

CHIEF EDITORS

Anders Busse Nielsen, Lisa Diedrich

MANAGING EDITOR

Catherine Szanto

AUTHORS

Stefan Darlan Boris, Lisa Diedrich,
Anders Folkesson, Hanna Fors, Allan
Gunnarson, Roland Gustavsson, Dana
Hladíková, Helena Mellqvist, Anders
Busse Nielsen, Jan Šesták, Henrik
Sjöman, Catherine Szanto, Petra
Thorpert, Björn Wiström

ILLUSTRATIONS

Image essays by Stefan Darlan Boris,
Daphne de Bruijn
All other illustrations are by the
authors, unless noted otherwise

COPY EDITING

Sara Butler

DESIGN

Daphne de Bruijn, Harry Harsema,
Blauwdruk Publishers

LITHOGRAPHY

Hans Dijkstra, Blauwdruk publishers

PRODUCTION

Harry Harsema, Blauwdruk publishers

PRINTING

Die Keure, Brussels

PUBLISHER

Blauwdruk publishers
in collaboration with
Swedish University of Agricultural
Sciences

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, re-use of illustrations, recitation, broadcasting, reproduction on microfilms or in other ways, and storage in databases. For any kind of use, permission of the copyright owner must be obtained.

©2020

Swedish University of Agricultural
Sciences and Blauwdruk Publishers
SLU Landscape, Department of
Landscape Architecture, Planning and
Management,
P.O. Box 58, 230 53 Alnarp, Sweden

Blauwdruk publishers
Generaal Foulkesweg 72, 6703 BW
Wageningen, The Netherlands
www.blauwdrukpublishers.com