

An aerial photograph of a city street, likely in a residential or urban area, showing a mix of green trees and buildings. The sky is a dramatic mix of orange, yellow, and dark grey, suggesting a sunset or sunrise. The street runs diagonally from the bottom right towards the top left. The overall mood is serene yet powerful, emphasizing the connection between nature and urban development.

URBAN FORESTS, TREES, and GREENSPACE

A POLITICAL ECOLOGY PERSPECTIVE

EDITED BY
L. ANDERS SANDBERG,
ADRINA BARDEKJIAN,
AND SADIA BUTT

ROUTLEDGE



Urban Forests, Trees, and Greenspace

A Political Ecology Perspective

**Edited by
L. Anders Sandberg,
Adrina Bardekjian,
and Sadia Butt**

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

earthscan
from Routledge

First published 2015
by Routledge
2 Park Square, Milton Park, Abingdon, Oxfordshire OX14 4RN
and
by Routledge
711 Third Avenue, New York, NY 10017

First issued in paperback 2016

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2015 L. Anders Sandberg, Adrina Bardekjian, and Sadia Butt,
selection and editorial material; individual chapters, the contributors

The right of the editors to be identified as the authors of the editorial
material, and of the authors for their individual chapters, has been
asserted in accordance with sections 77 and 78 of the Copyright,
Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or
reproduced or utilised in any form or by any electronic, mechanical, or
other means, now known or hereafter invented, including
photocopying and recording, or in any information storage or retrieval
system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or
registered trademarks, and are used only for identification and
explanation without intent to infringe.

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Urban forests, trees, and greenspace : a political ecology perspective /
edited by L. Anders Sandberg, Adrina Bardekjian, and Sadia Butt.
pages cm

Includes bibliographical references and index.

1. Urban forestry. 2. Urban landscape architecture. 3. City planning.
I. Sandberg, L. Anders, 1953– editor of compilation. II. Bardekjian,
Adrina, editor of compilation. III. Butt, Sadia, editor of compilation.

SB436.U735 2014

635.9'77–dc23

2014003126

ISBN 13: 978-1-138-28257-5 (pbk)

ISBN 13: 978-0-415-71410-5 (hbk)

Typeset in Baskerville
by Keystroke, Station Road, Codsall, Wolverhampton

Urban Forests, Trees, and Greenspace

Urban forests, trees, and greenspace are critical in contemporary planning and development of the city. Their study is not only a question of the growth and conservation of greenspaces, but also has social, cultural, and psychological dimensions. This book brings a perspective of political ecology to the complexities of urban trees and forests through three themes: human agency in urban forests and greenspace; arboreal and greenspace agency in the urban landscape; and actions and interventions in the urban forest.

Contributors include leading authorities from North America and Europe from a range of disciplines, including forestry, ecology, geography, landscape design, municipal planning, environmental policy, and environmental history.

L. Anders Sandberg is Professor and former Associate Dean in the Faculty of Environmental Studies at York University, Toronto, Canada. His two most recent books are *The Oak Ridges Moraine Battles: Development, Sprawl and Nature Conservation in the Toronto Region* (2013) and *Urban Explorations: Environmental Histories of the Toronto Region* (2013).

Adrina Bardekjian is a PhD candidate at the Faculty of Environmental Studies at York University, Toronto, Canada, where she studies under-represented narratives and strategic visioning for urban forestry praxis. She is an urban forestry researcher, writer, and educator, and works with a number of organizations on diverse projects and initiatives.

Sadia Butt is a PhD candidate at the Faculty of Forestry at the University of Toronto, Canada. She has worked in urban forestry for the last 15 years as a practitioner, researcher, and volunteer in raising urban forest awareness through environmental education.

“This book is the first to use the lens of political ecology to understand urban forests and finally provide us with a much needed politicized view of these spaces, based on case studies from around the globe.”

– *Guy Baeten, Professor of Human Geography, Lund University, Sweden*

“This wonderful volume incorporates new theoretical ground in the field of political ecology. Diverse chapters bring nuanced and balanced attention to the social and ecological dynamism that shapes the myriad ways through which urban forests constitute and are constituted by everyday lived experiences, politics, and institutional dynamics of today’s cities.”

– *Patrick Hurley, Associate Professor and Chair, Environmental Studies, Ursinus College, Collegeville, PA, USA*

“A collection that makes urban political ecology accessible to a wide readership without losing the sophistication needed to handle the complexity and contradictions of the field. Its compelling narratives stretch from unruly trees and people in diverse cities around the world, to original ways of thinking about nature and the city.”

– *Alan Mabin, Research Fellow, Capital Cities project, University of Pretoria, South Africa*

Contributors

Bengi Akbulut is an Istanbul-based political economist and activist whose joint and independent work has appeared in the *Cambridge Journal of Economics and Development and Change* among others. She holds a PhD from the University of Massachusetts, Amherst, USA, and her research focuses broadly on political economy of development, including issues of political ecology, agrarian and environmental change, state-society relationships, non-capitalist economies, social and environmental movements, and gender and household work.

Pippin Anderson is Lecturer with the Department of Environmental and Geographical Science, and runs the Urban Ecology CityLab at the African Centre for Cities. She is based at the University of Cape Town in South Africa and has a research interest in the ecology of peopled landscapes.

Adrina Bardekjian is a PhD candidate at the Faculty of Environmental Studies at York University, Toronto, Canada, where she studies under-represented narratives and strategic visioning for urban forestry praxis. She is an urban forestry researcher, writer, and educator, and works with a number of organizations on diverse projects and initiatives.

J. O. Joby Bass is Associate Professor of Geography at the University of Southern Mississippi in Hattiesburg, USA. A cultural geographer with interests in human and human–environment relationships and the landscapes they create, he has focused much of his research on the use of repeat photography in Latin America.

Jay Bolthouse is a PhD candidate at the Department of Natural Environmental Studies at the University of Tokyo, Japan. His work focuses on the constantly transforming relationship between trees and cities from the perspectives of historical geography and political ecology.

Irus Braverman is Professor of Law and Adjunct Professor of Geography at SUNY Buffalo, USA.

Sadia Butt is a PhD candidate at the Faculty of Forestry at the University of Toronto, Canada. She has worked in urban forestry for the last 15 years as a practitioner, researcher, and volunteer in raising urban forest awareness through environmental education.

Lindsay K. Campbell is a research social scientist with the USDA Forest Service Northern Research Station, who has worked for 12 years out of the New York City Urban Field Station. She holds a PhD in geography from Rutgers University, USA, and her research focuses on urban stewardship, sustainability, and environmental policymaking.

Joanna Dean is Associate Professor of History at Carleton University, Ottawa, Canada. She teaches Canadian environmental history and conducts research into the history of urban trees.

Natalie Marie Gulsrud is a PhD candidate in the Department of Parks and Urban Landscapes at the Danish Center for Forest, Landscape, and Planning at the University of Copenhagen, Denmark. She has worked for over 5 years in the public health sector and her main research interest relates to the crossover between urban sustainability policy, green city marketing, and place making.

Roland Gustavsson is Professor at the Department for Landscape Architecture, Planning and Management at the Swedish University of Agricultural Sciences, Alnarp, Sweden. In his book *The New Landscape* (1994) he tries to bridge rural and urban cultures, taking the reader from a deepened understanding of landscape and landscape management to a series of solutions to deal with change.

Cynthia Imogen Hammond is Associate Professor and Chair of the Department of Art History, Concordia University, Montreal, Canada, where she teaches interdisciplinary, collaborative approaches to the study of urban landscapes and architectural history. She is the author of the book *Architects, Angels, Activists and the City of Bath, 1765–1965* (2012).

Blake Hudson holds a joint appointment as Associate Professor at the Law Center and the School of the Coast and Environment at Louisiana State University, USA, where he teaches natural resources and environmental law. He recently authored the book *Constitutions and the Commons: The Impact of Federalist Structures on Local, National and Global Resource Governance* (2014).

Owain Jones is Professor of Environmental Humanities at the School of Humanities and Cultural Industries at Bath Spa University, UK. Funded by a number of academic research projects he has studied and written upon various aspects of nature–society relations, including trees and forests; water, tides, and communities; and intersecting processes of memory, affect, and agency.

Cecil C. Konijnendijk van den Bosch heads the landscape department at the Swedish University of Agricultural Sciences, Alnarp, Sweden, and is also a part-time professor of greenspace management at the University of Copenhagen, Denmark. He has authored books such as *The Forest and the City—The Cultural Landscape of Urban Woodland* (2008) and is editor-in-chief of the journal *Urban Forestry & Urban Greening*.

Brendon M.H. Larson is Associate Professor in the Faculty of Environment at the University of Waterloo, Canada. He speaks and writes widely on perceptions of conservation issues, and recently wrote *Metaphors for Environmental Sustainability: Redefining our Relationship with Nature* (2011).

Helena Mellqvist is a PhD student at the Department for Landscape Architecture, Planning and Management at the Swedish University of Agricultural Sciences, Alnarp, Sweden. During the past 10 years, she has worked as a landscape architect developing a great interest and knowledge in fostering dialogue between people with different backgrounds and perspectives using the landscape as shared basis.

Can-Seng Ooi is the Director of the Center for Leisure and Culture Services Research and Professor at the Copenhagen Business School, Denmark. He has been conducting sociological research on various aspects of Singapore society for more than two decades.

Darren Patrick is a PhD Candidate and Ontario Trillium Scholar in the Faculty of Environmental Studies at York University, Toronto, Canada, whose research brings queer studies/theory and urban studies/theory together to tell complex ecological stories. He has recently published in *Social and Cultural Geography* and has served as the Academic Reviews Editor for a special issue of *Undercurrents: Journal of Critical Environmental Studies*.

Harold Perkins is Associate Professor in the Department of Geography at Ohio University, USA. He is an urban political ecologist who studies the governance of forests, parks, and waterways.

L. Anders Sandberg is a Professor and former Associate Dean in the Faculty of Environmental Studies at York University, Toronto, Canada. His two most recent books are *The Oak Ridges Moraine Battles: Development, Sprawl and Nature Conservation in the Toronto Region* (2013) and *Urban Explorations: Environmental Histories of the Toronto Region* (2013).

Gregory Smith is a Professor in the Graduate School of Education and Counseling at Lewis & Clark College in Portland, Oregon, USA. He writes and speaks about integrating place and community learning into the curriculum as a means for advancing education for sustainability.

Ann Van Herzele works as Senior Researcher at the Nature & Society group, Research Institute for Nature and Forest (INBO), Brussels, Belgium. She has long-standing experience both in practice and research in the field of communication and participation in environmental planning and management.

Kathleen Vaughan is an artist and Associate Professor of Art Education at Concordia University in Montreal, Canada. Her work about place, home, and belonging has an increasingly environmental orientation.

Preface

This book started as a conference idea three years ago and culminated in the conference “Urban Forests and Political Ecologies: Celebrating Transdisciplinarity,” (UFPE), held on April 18–20, 2013, at the University of Toronto. The conference was a huge success where academics, professionals, environmentalists and artists mingled to present and discuss their work on urban forests, trees and greenspace.

We would like to thank TD Friends for the Environment Foundation as the main sponsor of the conference. Its public outreach mandate was met wonderfully by the diverse attendees in the practicing, professional and artistic communities.

We would also like to thank the three conference partners: the Faculty of Forestry at the University of Toronto, the Faculty of Environmental Studies at York University and the Humber Arboretum and Centre for Urban Ecology. In particular, we would like to acknowledge Amalia Veneziano and the conference organizing committee for supporting the initial idea for the UFPE conference, the volunteers and our art curator, Catherine Campbell, for their dedication to this unique event.

Sponsors from the University of Toronto included: the Faculty of Forestry, the Forestry Alumni Class of 1954 and the Department of Fine Art. Sponsors from York University included: the Faculty of Environmental Studies, the Vice-President Academic and Provost Rhonda Lenton, Vice-President Research and Innovation Robert Haché, Associate Vice-President Research Lisa Phillips, Canada Research Chair in Sustainability and Culture, the CITY Institute, York University Libraries and Osgoode Hall Law School. Other sponsors included: the International Union of Forest Research Organizations, the International Society of Arboriculture Ontario Chapter, the Network in Canadian History and the Environment, the Gosling Research Institute for Plant Preservation at the University of Guelph, DAVEY Resource Group, Tree Canada, the Ontario Urban Forest Council, Trees Ontario, the Toronto Cancer Prevention Coalition, the Town of Oakville and Dr. Robert Bateman.

We also want to thank the many participants of the conference who stimulated the conversation around urban forests. Some of the participants at the conference have developed their talks into chapters for this book. But there are also many other contributors who we invited subsequent to the conference in order to broaden the geographical scope and theoretical depth of the book.

In addition to our own reviews of the contributors' chapters, we have also relied on external reviewers and some of the contributors for critical assessments. We would like to thank the following for their assistance: Jay Bolthouse, Matthew Gandy, Hilary Inwood, Owain Jones, Ute Lehrer, Terry G. McGee, Harold Perkins, Cate Sandilands, Lisa Wallace and Gerda Wekerle. We would also like to acknowledge all the other participants at the conference who presented papers and artwork and contributed to the discussions, especially Roger Keil, Professor at the Faculty of Environmental Studies at York University and at the time Director of the CITY Institute, who provided an extensive end-of-the-conference commentary on the two-day proceedings.

Tim Hardwick and Ashley Wright at Earthscan showed tremendous confidence and support for our efforts and the anonymous reviewers of the initial book proposal provided sober advice and great encouragement. The collaboration of all the above individuals for the conference, as well as the interest and support by Earthscan, have made this book possible.

L. Anders Sandberg would like to express a thank you to his wife Maria Legerstee for her support and inspiration. He would like thank his co-editors for their enthusiasm and efforts to make both the conference and this book a reality.

Adrina Bardekjian would like to thank her partner, Chant Asaduryan, for his continual encouragement and creative insights. She would also like to express a sincere thanks to her co-editors, the contributing authors and conference participants for their inspiration and dedication to this work.

Sadia Butt is grateful for the opportunity to have worked with her co-editors, conference presenters and contributing authors. Their work continues to be both a source of knowledge and inspiration for future paths.

Contents

<i>List of Illustrations</i>	ix
<i>List of Contributors</i>	xiii
<i>Preface</i>	xvii
1 Introduction	1
L. ANDERS SANDBERG, ADRINA BARDEKJIAN, AND SADIA BUTT	
PART 1	
Human Agency in Urban Forests and Greenspace	17
2 Urban Forests are Social Natures: Markets, Race, Class, and Gender in Relation to (Un)Just Urban Environments	19
HAROLD PERKINS	
3 From Government to Governance: Contribution to the Political Ecology of Urban Forestry	35
CECIL C. KONIJNENDIJK VAN DEN BOSCH	
4 A Genealogy of Urban Forest Discourse in Flanders	47
ANN VAN HERZELE	
5 Institutions, Law, and the Political Ecology of Urban Forests: A Comparative Approach	61
BLAKE HUDSON	
6 Manufacturing Green Consensus: Urban Greenspace Governance in Singapore	77
NATALIE MARIE GULSRUD AND CAN-SENG OOI	

7 The Places of Trees in Honduras: Contributions of Public Spaces and Smallholders	93
J. O. JOBY BASS	
PART 2	
Arboreal and Greenspace Agency in the Urban Landscape	109
8 (Urban) Places of Trees: Affective Embodiment, Politics, Identity, and Materiality	111
OWAIN JONES	
9 Order and Disorder in the Urban Forest: A Foucauldian–Latourian Perspective	132
IRUS BRAVERMAN	
10 Four Arboricultures of the Tokyo Metropolis: High and Low, West and East, From Edo to 2020	147
JAY BOLTHOUSE	
11 The Unruly Tree: Stories from the Archives	162
JOANNA DEAN	
12 Seeking Citizenship: The Norway Maple (<i>Acer platanoides</i>) in Canada	176
BRENDON M. H. LARSON	
13 Queering the Urban Forest: Invasions, Mutualisms, and Eco-Political Creativity with the Tree of Heaven (<i>Ailanthus altissima</i>)	191
DARREN PATRICK	
14 The Thin End of the Green Wedge: Berlin’s Planned and Unplanned Urban Landscapes	207
CYNTHIA IMOGEN HAMMOND	

PART 3

Actions and Interventions in the Urban Forest	225
15 “A Few Trees” in Gezi Park: Resisting the Spatial Politics of Neoliberalism in Turkey	227
BENGI AKBULUT	
16 Constructing New York City’s Urban Forest: The Politics and Governance of the MillionTreesNYC Campaign	242
LINDSAY K. CAMPBELL	
17 Reimagining Ecology in the City of Cape Town: Contemporary Urban Ecological Research and the Role of the African Centre for Cities	261
PIPPIN ANDERSON	
18 Cultivating Citizen Stewards: Lessons from Formal and Non-Formal Educators	277
GREGORY SMITH	
19 Learning and Acting through Participatory Landscape Planning: The Case of the Bräkne River Valley, Sweden	292
HELENA MELLQVIST AND ROLAND GUSTAVSSON	
20 Art, Enchantment, and the Urban Forest: A Step, a Stitch, a Sense of Self	307
KATHLEEN VAUGHAN	
<i>Index</i>	322

List of Illustrations

Figures

- | | | |
|-----|--|----|
| 2.1 | Tall and proud. Early springtime view of vigorous and manicured street trees in Milwaukee's affluent East Side neighborhood, USA. | 23 |
| 2.2 | Under the wire. Early springtime view of small and mangled street trees in Milwaukee's impoverished Harambee neighborhood. | 24 |
| 2.3 | Arboricide. Wintertime view of a recently planted tree struck down by vandals in Milwaukee's impoverished Lynden Hill neighborhood. | 27 |
| 3.1 | Visualization of the four dimensions of the Policy Arrangement Approach. | 38 |
| 3.2 | The urban forest as 'powerscape': Boboli Gardens in Florence, Italy. | 39 |
| 3.3 | Management of Central Park in New York City, USA, represents a 'governance with government' approach, with the city's park department and the private Central Park Conservancy sharing responsibility. | 41 |
| 3.4 | Stockholm's Urban National Park represents a complex governance arrangement. | 41 |
| 4.1 | "The close-to-nature forestry" concept—influential in discourse on forest expansion—uses natural processes in primeval forests as a prime source of inspiration. | 50 |
| 4.2 | The forest image was changed from one massive entity to an open concept of interacting land uses. | 55 |
| 4.3 | Farmers' protest against the Park Forest project: "Where may I graze now?" | 57 |
| 5.1 | Forests currently on the outskirts of urban areas will be the urban forests of tomorrow, and should be managed with that potentiality in mind. | 63 |
| 5.2 | "Local" forest in south Alabama, USA. | 67 |
| 5.3 | Forested watershed in the southern part of the US state of Alabama. | 68 |
| 6.1 | Supertree Grove by day. Gardens by the Bay, Singapore. | 78 |
| 6.2 | Tourists in front of green wall and waterfall. | 85 |
| 6.3 | Citizens engaged in community gardening, Singapore. | 86 |

7.1	Santa Lucia, Francisco Morazan, former mining center north-east of Tegucigalpa, Honduras.	96
7.2	Llano Yarula, La Paz, Bolivia.	98
7.3	El Chichicaste, El Paraiso, Honduras.	99
8.1	The giant beech tree with missing half of canopy.	113
8.2	Newly planted tree in Munich, Germany. Swathed in fabric and supported with multiple cables.	123
8.3	The verticality of many tree species makes them an ideal spatial medium for city streets (Munich).	124
8.4	The Party in the Square within the spaces formed by the trees.	127
9.1	The natural grid, Buffalo, NY, USA.	136
9.2	Trees, grates, and other street furniture, Cambridge, MA, USA.	137
9.3	Dig-Safe, Ithaca, NY, USA.	141
10.1	Map of central Tokyo, Japan, depicting sites mentioned in the text.	148
10.2	Four images of Tokyo's High City arboricultures.	150
10.3	Four images of Tokyo's Low City arboricultures.	152
10.4	Four images of the arboricultures of Tokyo's western periphery.	155
10.5	Four images of the arboricultures of Tokyo's eastern periphery.	158
11.1	Child planting a tree in an Ottawa suburb to celebrate Canada's Centennial, 1967, Ottawa, ON.	168
11.2	Ottawa's Central Park looking east, 1920s.	170
12.1	An old-growth sugar maple (<i>Acer saccharum</i>) forest in southern Ontario, Canada.	176
12.2	Canada's \$20 polymer banknote, which was released on November 7, 2012.	177
12.3	The contrasting leaves and samaras of sugar maple and Norway maple.	182
12.4	Forty-year old Norway maple (<i>Acer platanoides</i>) trees along a residential street in Guelph, Ontario, Canada.	184
13.1	<i>Ailanthus</i> . 30th Street and 11th Ave, Manhattan, NY, USA, 2002 (removed 2002).	197
13.2	<i>Ailanthus altissima</i> on Detroit Tree of Heaven Woodshop's tree farm as pictured for an exhibition at the SMART Museum of Art (Chicago, IL, USA).	200
13.3	<i>Tehnică pentru o viață</i> (Technique for a life time).	202
14.1	Design for green roof, Canadian Embassy. 17 Leipziger Platz, Berlin, Germany (completed 2005).	208
14.2	Canadian Embassy (middle-right) at Leipziger Platz, Berlin, with the towers of Potsdamer Platz to the left.	215
14.3	The green roof of the Canadian embassy in Berlin, 2010.	219
15.1	Protestors in Gezi Park, Istanbul, Turkey, on the third day of protests.	233
15.2	Barricades on a main artery leading to Taksim Square, Istanbul.	235
15.3	Gezi Park Library, Istanbul.	236
16.1	Launching the MillionTreesNYC campaign as a public-private partnership.	249