Shalini Dhyani
Mallika Sardeshpande *Editors*

Urban Foraging in the Changing World

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Editors
Shalini Dhyani
National Environmental Engineering
Research Institute, NM
Council Scientific & Industrial Research
Nagpur, Maharashtra, India

Mallika Sardeshpande
University of KwaZulu-Natal
Pietermaritzburg, South Africa

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Foreword

One late summer afternoon in 2004, I was enjoying a stroll in Edinburgh's Braid Hills. It was a great year for brambles (*Rubus* sp.), and I had been plucking the berries from bushes, popping them into my mouth as I explored the trails. Coming down out of the hills and heading back toward my flat, I met two people who had been more intentional than I about foraging in this lovely park on the edge of the city. They were headed home with baskets filled with brambles destined to become a delicious finale for their evening meal. By this point in time, I had already been studying foraging in rural environments in the USA for a decade. In fact, at the invitation of UK Forest Research, I was in Scotland to study foraging throughout that country. Nevertheless, I continued to interview only rural foragers and it was another 4 years before it occurred to me that urban foraging might merit focused research effort.

I suppose I can forgive myself for this temporary oversight. After all, when I began my investigations of foraging in rural US regions, public land managers told me firmly and emphatically that nobody did that anymore. One could only imagine how much firmer the conviction would be about foraging in urban environments. And yet, I had seen it with my own eyes, even engaged in the practice myself. Surely there was something to the idea that warranted a closer look. In pursuit of an answer to that question, my colleagues Patrick Hurley, Rebecca McLain, Melissa Poe, and I began to review the literature in search of existing research on urban foraging. We found that there was plenty of adjacent research, but nothing in the English language literature we could find explicitly addressed urban foraging. And so, we began exploratory studies in Seattle and New York City, which gradually extended to studies conducted in the cities of Baltimore and Philadelphia. It quickly became clear that urban foraging was ripe for research.

Once we began to seek it out, evidence of urban foraging was abundant in both physical and virtual spaces. Colleagues in New York City sent us photographs of people harvesting dandelion (*Taraxacum* spp.) leaves on early spring mornings. The Himalayan blackberries (*Rubus armeniacus*) that are so abundant in Seattle and its surrounding exurban areas were being picked by city residents in quantities both large and small. A group of artists in Los Angeles had discovered laws in that city that allow the harvest of fruit, both wild and domesticated, in public rights of way and had begun offering tours doing just that. There were apps crowdsourcing information about the locations of forageable species in a variety of cities in North

America and western Europe, as well as dozens of groups of people using online forums to share information and organize foraging. Further, judging by media attention to the 1986 arrest of a man for picking a dandelion in New York's Central Park, urban foraging was far from a new phenomenon.

Meanwhile, continents away other scholars also had taken up the study of urban foraging. Notably Prof. Charles Shackleton (Rhodes University, South Africa) and his students were examining foraging in diverse environments in southern Africa, including cities and townships. Dr. Eefke Molle (University of Aberystwyth, United Kingdom) conducted a brilliant study of foraging in Kampala, Uganda, noting a bimodal pattern in the economic status of individuals most likely to engage in foraging. At roughly the same time, Dr. Harini Nagendra (Azim Premji University, India) and her students were looking at the effects of exclusionary development on foraging and other self-provisioning activities in Bengaluru. And Prof. Ingo Kowarik (Technische Universitat Berlin, Germany), together with his students, were conducting detailed ethnographic and ecological studies of foraging in parks and informal green spaces in Berlin. Here and there, individual graduate students all over the world were examining urban foraging through diverse disciplinary lenses, including political economy and sociology.

It is noteworthy that this research begins to emerge around 2008, the year in which the United Nations Population Fund estimated that for the first time more than half of humanity was living in cities. Independently, each individual scholar and team of researchers had realized that this ancient human practice was finding continued expression in the novel ecologies of cities. Not only was this intriguing, but it was also almost certainly, socially, and ecologically significant. But how? We applied our diverse theories and methods, with results that were at once somewhat disparate and yet revealed striking commonalities across cultures, economies, and urban structures. A picture of urban foraging as a ubiquitous and significant human practice began to emerge from points of data scattered across the globe.

Notwithstanding these advances in our understanding, much remains to be learned about foraging for wild plants and fungi in cityscapes from central business districts to parks both large and small, to peripheries and exurban spaces. These gaps are geographical and topical. Geographically, with some important exceptions, a disproportionate volume of the literature to date (at least that published in English) looks at urban foraging in the cities of North America and Western Europe. And much of that literature (again, with a growing number of important exceptions) examines the foraging practices of the dominant cultures of those nations. We are left, then, with some glaring holes in our knowledge. We know almost nothing about how international migrants, many of whom are from rural areas, may adapt knowledge and practices originating in distant places and cultures to their new urban homes. Likewise, there are several regions outside the global North where focused research on urban foraging appears to be entirely lacking. Topically, health and safety are crying out for additional research. A small number of studies have tested urban foraged fruits and greens for heavy metals and other contaminants, but many more are needed. The severe disruptions to economies and supply chains during the global SARS CoV-2 pandemic lend additional salience to improved understanding

of the health and nutrition outcomes of consuming urban foraged foods. Explorations of governance structures that support or impede foraging in cities have only just begun, with special need to interrogate their outcomes in terms of equity and sustainability. And this list is far from an exhaustive tally of the areas of opportunity and need for further research on urban foraging.

Happily, the book you have before you makes an essential contribution to filling multiple gaps in our knowledge. From chapters documenting a foraging field course in the coastal United Kingdom to the practices and perceptions of foragers in Lagos, Nigeria, from the role of foraging in health and nutrition in the major cities of Uttar Pradesh, India, to the implications of conservation policy for urban foraging in Canadian cities, this book augments areas of existing knowledge about urban foraging and opens up important new topics. Like urban foraging itself, *Urban Foraging in the Changing world* connects many dots, revealing a more complete picture of this fundamental relationship between human beings and nature than we have had to date. It marks and propels the study of urban foraging from its infancy to maturity.

As *Urban Foraging in the Changing world* demonstrates, urban foraging is not simply a curiosity. Rather, it has direct implications for policy at scales from the local to the global. Enhanced understanding of urban foraging can and, I would argue, should inform the design of our cities and the ways we govern greenspaces in them. It also has much to say to international efforts to conserve biodiversity and support human well-being. As the IPBES *Assessment of Sustainable Use of Wild Species*, which I co-chaired, notes "dozens to hundreds of wild plant and fungi species [are] gathered for food, medicine, firewood, decoration and cultural practices in urban ecosystems worldwide" (2022:12). These uses can make largely unacknowledged contributions to realizing the United Nations 2030 Agenda, notably Sustainable Development Goals 2. Zero Hunger, 3. Good Health and Well-being, and 11. Sustainable Cities and Communities. As it turns out, the brambles of Edinburgh, like the case studies throughout this book, offer us windows into existing and potential strategies for realizing those goals.

Burlington, VT, USA Marla R. Emery
28 August 2023

Acknowledgments

The editors would like to express heartfelt gratitude to all involved, directly and indirectly, for their constant support and contributions, that have helped compile this book on the futuristic subject of urban foraging. We have been successful in putting together this important scientific contribution that we are sure will be crucial to understanding and acknowledging the growing relevance of this topic in both the Global North and South. A topic that is relevant in the present context and will be equally important in the future, not only for providing nutritional security in fast growing urban areas but also to improve sense of belongingness, nature connectedness, and place-based attachment to improve urban resilience.

We are immensely grateful to numerous subject matter experts, researchers, and practitioners from different corners of the world who invested significant amounts of time beyond their professional obligations to contribute to this volume. Their devoted and sustained efforts have yielded this rich and diverse compilation in which each contribution develops the nuances of urban foraging as a highly prevalent practice. We would also like to thank Mr. Manu Thomas (CSIR-NEERI, Nagpur) for his assistance in formatting the content. We would also like to express our gratitude to the Springer Production Team, in particular Mrs. Aakanksha Tyagi and Ms. Muthuneela Muthukumar, technical assistance, and for generously keeping time while we ensured that we collectively submit a well-rounded and comprehensive book.

We acknowledge that some geographies and aspects are still under-represented in this volume, and hope that this publication stirs interest and action towards greater inclusivity. Despite our best efforts to ensure accuracy, it is still possible that a few errors may have crept in because of the pace of production and the diversity of formats. The editors have read through all of the chapters and personally reviewed them in accordance with international standards, including publication ethics that specifically aim to reduce plagiarism and resemblance from already existing publications. If readers of this book have any relevant feedback to help us improve our future releases, we would be ever grateful to have it.

We express our gratitude to our families, especially our parents, siblings, spouses, and children, for their support, understanding, and encouragement as we engaged in this mammoth task.

We conclude by expressing our deep gratitude to Dr. Marla Emery, subject authority on the subject, Co-Chair of the Sustainable Use Assessment (2022) in

Co-Chair of the Assessment of Sustainable Use of Wild Species, a report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and former employee of the U.S. Department of Agriculture (USDA), Forest Service, for kindly authoring the foreword for this book.

-Shalini Dhyani and Mallika Sardeshpande

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Editors and Contributors

About the Editors

Shalini Dhyani (PhD) is a Principal Scientist at the National Environment Engineering Research Institute, a constituent laboratory under the Council for Science and Industrial Research, India. She is Asia Vice Chair and Steering Committee member in the Commission on Ecosystems Management of the International Union for Conservation of Nature (IUCN). She is a UNESCO-TWAS (The World Academy of Science) Associate and visiting scientist at the Center for International Forestry Research (CIFOR), Bogor. She has been the lead author in the IPBES global thematic assessment on the sustainable use of wild species and the Asia-Pacific regional assessment of biodiversity and ecosystem services. Shalini works on interlinkages between socio-ecological systems, following diverse knowledge systems and sustainability science approaches for mainstreaming the relevance of ecosystems and biodiversity, multi-sectoral and people centric approaches in decision-making. She is involved in the editorial boards of Sustainability Science, PLOS One, and Anthropocene Science journals.

Mallika Sardeshpande (PhD) is a researcher affiliated with the Centre for Transformative Food Systems at the University of KwaZulu-Natal, South Africa, and the Ashoka Trust for Research in Ecology and the Environment, India. She works on natural resource systems with a focus on agroecology, biodiversity, forestry, and urban systems. Her primary work involves the design and development of productive spaces with indigenous species in collaboration with communities, local governments, and non-government organizations. She also works with various global consortia to synthesize research and policy to make food systems ecologically, nutritionally, and socially sustainable and to increase urban resilience through green infrastructure management. She is an associate editor at Cities and the Environment Journal.

Contributors

Janaína Deane de Abreu Sá Diniz University of Brasília, Brasilia, Brazil

Opeyemi Adeyemi Department of Environmental Science, Rhodes University, Makhanda (Grahamstown), South Africa

Sarah Becker Ursinus College, Collegeville, PA, USA

Dhanya Bhaskar Indian Institute of Forest Management, Bhopal, India

Tuybia Bilal Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Barbara Loureiro Borges Department of Forest Sciences, University of Brasília, Brasilia, Brazil

Sadia Butt Daniels Institute of Frestry and Conservation, University of Toronto, Toronto, ON, Canada

Joana Chan University of Vermont, Burlington, VT, USA

Lihua Cui Graduate School of Global Environmental Studies, Kyoto University, Kyoto, Japan

Oinam Sunanda Devi Assam State Biodiversity Board, Aranya Bhawan, Guwahati, Assam, India

Shalini Dhyani CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nehru Marg, Nagpur, Maharashtra, India

Commission on Ecosystem Management (CEM), International Union for the Conservation of Nature (IUCN), Gland, Switzerland

Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, Uttar Pradesh, India

Marla R. Emery Norwegian Institute for Nature Research and Rubenstein School of Environment and Natural Resources, University of Vermont, Burlington, VT, USA

S. A. Gangoo Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Jessica Pereira Garcia Center for Sustainable Development, University of Brasília, Brasilia, Brazil

Sonali Ghosh Chief Conservator of Forests (REWP), Aranya Bhawan, Guwahati, Assam, India

Mikelis Grivins Riga Stradins University, Riga, Latvia

Stéphane Guéneau Cirad – Moisa (French Agricultural Research Centre for International Development – Montpellier Interdisciplinary Center on Sustainable Agri-Food Systems), Montpellier, France

Humara Gulzar Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Md Abdul Halim Daniels Institute of Forestry and Conservation, University of Toronto, Toronto, ON, Canada

Holly Harris School of Anthropology and Conservation, University of Kent, Canterbury, UK

Patrick T. Hurley Ursinus College, Collegeville, PA, USA

M. A. Islam Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Imrul Kayes Daniels Institute of Forestry and Conservation, University of Toronto, Toronto, ON, Canada

Ashish Lahoti Institute for Global Environmental Strategies (IGES), Tokyo, Japan

Shruti Lahoti Institute for Global Environmental Strategies (IGES), Tokyo, Japan

Brian J. Leffler Lewis and Clark National Historic Trail, Omaha, NE, USA

A. R. Malik Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

N. Manika FloraFauna Science Foundation, Lucknow, Uttar Pradesh, India

Commission on Ecosystem Management (CEM), International Union for the Conservation of Nature (IUCN), Gland, Switzerland

T. H. Masoodi Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Laura McCarthy School of Arts, University of Gloucestershire, Gloucestershire, UK

Kristin McGillis Department of Environmental Studies, Ursinus College, Collegeville, PA, USA

Tahir Mushtaq Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Mir Muskan Un Nisa Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

N. A. Pala Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Ishtiyak Ahmad Peerzada Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Dhanya Rajaram Bangalore, India

Samudyatha Ramananda Indian Institute of Forest Management, Bhopal, India

Sharmistha Rej Indian Institute of Forest Management, Bhopal, India

Christoph D. D. Rupprecht Department of Environmental Design, Faculty for Collaborative Regional Innovation, Ehime University, Ehime, Japan

Alessio Russo School of Arts, University of Gloucestershire, Gloucestershire, UK

Osamu Saito Institute for Global Environmental Strategies (IGES), Tokyo, Japan

Mallika Sardeshpande Centre for Transformative Agriculture and Food Systems, University of KwaZulu-Natal, Scottsville, South Africa

Ashoka Trust for Research in Ecology and the Environment, Bengaluru, India

Mallika Sardeshpande Centre for Transformative Agriculture and Food Systems, University of KwaZulu-Natal, Scottsville, South Africa

Ashoka Trust for Research in Ecology and the Environment, Bengaluru, India

Charlie Shackleton Department of Environmental Science, Rhodes University, Makhanda (Grahamstown), South Africa

Rika Shinkai Research Institute for Humanity and Nature, FEAST NPO, Kyoto, Japan

Jayshree Shukla National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur, Maharashtra, India

Abhijit Sinha Delhi, India

Sharmila Sinha Delhi, India

Sivajanani Sivarajah Département des sciences du bois et de la forêt, Université Laval, Québec, QC, Canada

P. A. Sofi Faculty of Forestry, Sher-e-Kashmir University of Agricultural Sciences & Technology, Wadoora, Jammu & Kashmir, India

Radhika Sood CSIR-National Environmental Engineering Research Institute, Nagpur, Maharashtra, India

Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, Uttar Pradesh, India

Maximilian Spiegelberg FEAST NPO, Kyoto, Japan

Aoi Yoshida AOI Landscape Design LLC, Tokyo, Japan

Abbreviations

ACS	American Community Survey
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
AoF	Association of Foragers
ASL	Above Sea Level
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BMC	Biodiversity Management Committees
BNP	Bannerghatta National Park
CBD	Convention on Biological Diversity
CHF	Congestive Heart Failure
CLU	Crown Land Use
CPR	Common Pool Resource
CSCAF	Climate Smart Cities Assessment Framework
DAFF	Department of Agriculture, Fisheries, and Forests
EDTEA	Economic Development, Tourism, and Environmental Affairs
EoN	Experiences of Nature
ES	Ecosystem Services
ESZ	Eco-Sensitive Zone
FFC	Foraging Field Courses
GIS	Geographic Information System
HNC	Human-Nature Connections
IGP	Indo Gangetic Plain
IVI	Importance Value Index
JFMC	Joint Forest Management Committee
LGAs	Local Government Areas
LPG	Liquid Petroleum Gas
MECP	Ministry of Environment, Conservation and Parks
MoHUA	Ministry of Housing and Urban Affairs
NbS	Nature-based Solutions
NE	Natural England
NMC	Nagpur Municipal Corporation
NTAs	Neighborhood Tabulation Areas
OMNRF	Ontario Ministry of Natural Resources and Forestry
PADCNR	Pennsylvania Department of Conservation and Natural Resources
PAs	Protected Areas

PBR	People's Biodiversity Register
RDP	Reconstruction and Development Programme
RMP	Revised Master Plan
SARA	Species at Risk Act
SEM	Social-Ecological Memory
SPSS	Statistical Package for Social Sciences
TEK	Traditional Ecological Knowledge
TKDL	Traditional Knowledge Digital Library
UF	Urban Forests
UFMP	Urban Forestry Management Plan
UGS	Urban Green Spaces

Part I

Why Do Foragers Forage

Urban Foraging in a Changing World: An Introduction

1

Mallika Sardeshpande and Shalini Dhyani

Abstract

Foraging by humans is an activity that is increasingly being observed in urban areas. This book presents a collection of scientific research and practitioner perspectives on urban foraging from different parts of the world. The sections in the book document what urban humans forage for, why, where, and how, and what urban foraging could look like in the emerging future. Acknowledging that these aspects are inherently interlinked, this chapter iterates the relationships between urban foraging and experiential learning, human well-being, and environmental stewardship. We invite readers to delve into the diversity and possibilities of urban foraging.

Keywords

Ethnobiology · Local ecological knowledge · Socio-economics · Social-ecological systems · Urbanization

Humans forage for numerous things over the course of the day, not just juicy fruit on the farm or fresh produce at the shops. When we look for information in the news or entertainment on-screen, we continue to sift through our environment for meaning, inspiration, and connection. The act of foraging has intrigued researchers for decades, leading to a veritable body of work on the behavior of bees, birds, bears, and so on (Cestari et al. 2020; Fehlmann et al. 2021; Colin et al. 2022). There are

M. Sardeshpande (✉)
Centre for Transformative Agriculture and Food Systems, University of KwaZulu-Natal, Scottsville, South Africa

Ashoka Trust for Research in Ecology and the Environment, Bengaluru, India

S. Dhyani
CSIR-National Environmental Engineering Research Institute, Nagpur, India
e-mail: s_dhyani@neeri.res.in

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also several studies on human societies that live non-agrarian, non-sedentary lifestyles, and how this compares to the paradigm of present industrial societies (House et al. 2013; Gupta et al. 2017; Reyes-García et al. 2018). At the turn of the century came the recognition that humans also forage in urban environments, and it is not necessarily for food (Leckie and Given 2005; McCullough 2013), nor necessarily from economic deprivation (Cucullu 2006; Bates 2013). Since then, there has been a steady increase in the interest in urban foraging by humans, with the seminal work of Shackleton and colleagues (2017) adding momentum to the research.

In this book, we invite readers to explore the world of urban foraging through the lenses of diverse practitioners and researchers. The mechanistic definition of urban foraging is the practice of collecting naturally occurring resources from urban environments (Shackleton et al. 2017). However, much of the research on urban foraging goes beyond *what* is collected or foraged and investigates *why* people forage in urban environments. The tacit assumption that people forage to fill gaps in their household economies has been long overturned in the Global North (e.g., Poe et al. 2013), and more recently so in the Global South (e.g., Sardeshpande and Shackleton 2023). This book aims to provide a current overview of the knowledge on urban foraging for everyone from the uninitiated to the well-versed.

Cities are places of rapid sociodemographic and structural change. For example, urban influx can result in social densification, informality, and mobility (Iveson et al. 2019; Hamilton et al. 2020). These conditions often lead to increased pressures on physical resources such as infrastructure and energy (Petrescu et al. 2021; Freeman et al. 2023). Furthermore, urbanization can have significant impacts on ecological processes, altering the interactions between humans, nonhumans, and their environment (Teng et al. 2020). Urbanization continues to be an important driver of social-ecological change and a priority for more than half of the world's population (UNDESA 2018). It is believed that urban foraging can help people to adapt to these changes and complexities at different levels (Sardeshpande et al. 2021).

In this chapter, we outline the conceptual framings that have been linked to urban foraging that appear in the chapters that follow. At a personal level, urban foraging can help people experience their surroundings in a way that enriches tourists (Vaittinen and McGookin 2016) or enables new urban migrants to feel at home (Marquina et al. 2022). These personal experiences may also have psychological or spiritual benefits (Stöckelová et al. 2023; Ware 2022). Interpersonally within the wider community, urban foraging can help people build social ties across generations (Garekae and Shackleton 2020; Poe et al. 2013) as well as across different cultural backgrounds (Johnson Gaither et al. 2020). Intergenerational knowledge transfer related to urban foraging helps improve social cohesion and human well-being in the long run (Guenat et al. 2023).

In household economies, foraging can enable savings on expenditure and cash income from foraged goods and also be a source of food and financial security in times of shock (Clouse 2022; Sachdeva et al. 2018). Gender has an important role to play in food sovereignty, and typically more women are involved in foraging wild plants than men (Palliwoda et al. 2017; Howard 2003). Urban foraging can also contribute to dietary diversity, which is an important component of nutrition and

health (Garekae and Shackleton 2020). Foraging for resources in urban environments allows people to develop knowledge about their urban environments and their nonhuman cohabitants, fostering environmental learning and stewardship (Fischer and Kowarik 2020). Urban foraging improves place-based attachment, and sense of belonging, that can provide opportunities for co-governance of urban spaces by residents, local governments, and nongovernmental entities. Restoration of degraded urban green spaces for foraging purposes can develop resilience in urban spaces and among urban residents, as a co-benefit (Guenat et al. 2023; Arrington et al. 2017; McLain et al. 2014; Poe et al. 2014).

The book is divided into six sections; the first four sections respond to the basic questions, namely, why people forage, what is foraged, where, and how. Many of the chapters also characterize who the foragers are, based on their motivations, sociodemographics, or locations. Indeed, in the first section on why people forage, Grivins engages foragers (and the readers) in an exploration of forager identity—Is it about what you forage for, what you do with your foraged goods, or what personally motivates you to forage? Harris delves into the experience of foraging as a new way of (re)connecting with nature, fellow human beings, and food. Adeyemi and Shackleton explore foragers' own perceptions of their foraging activity, including previously undocumented pros and cons such as safety, shame, and gentrification. Dhyani describes the role of urban foraging in enabling cultural continuity of centuries-old traditions.

The second section on what is foraged documents ethnobiological aspects of resources foraged in different landscapes. Manika and Dhyani richly elaborate on the species, spaces, seasons, and festivities related to foraging in multiple cities from the populous Indian state of Uttar Pradesh. Peerzada et al. present a detailed economic valuation of the contribution of foraged species in urban areas of the relatively understudied Indian state of Kashmir. Lahoti et al. establish a baseline for forageable plant species across different urban green spaces in the growing Indian city of Nagpur.

The third section on where urban foraging occurs describes the spatial aspects that are key to understanding patterns, which can aid urban planning and policy. Becker et al. use a geographic information systems approach to map some culturally important plant species in New York, and their relative accessibility by public transport—a very relevant analysis, considering much of urban foraging occurs when people are in transit across town. Russo and McCarthy trace the evolution of green spaces where foraging occurs and offer a glimpse into what foragers would want these green spaces to look like, providing actionable suggestions to urban planners. In their rigorous review of Canadian legislation interfacing with urban foraging, Sivarajah et al. find many restrictive clauses and recommend further social-ecological evidence be gathered to help tailor foraging-friendly policies.

The fourth section on how foraging occurs includes examples of the pathways through which foraging is enabled or inhibited. Hurley et al. describe the role of social media in mobilizing the knowledge of sustainable foraging to enable wider utility. Bhaskar et al. look at some emerging initiatives in the Global South that promote urban foraging and discuss how urbanization can also reduce the feasibility

of foraging in some cases. Sood and Dhyani document diminishing urban foraging practices in mountainous regions and suggest that growing tourism pressures can be cautiously converted to win-win solutions for sustainable development.

The fifth section presents some spontaneous perspectives from practitioners that speak to a confluence of all the previous themes. Rajaram presents an evocative and vibrant picture of fast-urbanizing areas where local foragers hold their own by creating awareness among urbanites. Sinha and Sinha walk readers through some cherished urban spaces with their passionate co-citizens and a sense of wonder. Devi and Ghosh walk readers through a traditional market, sharing local knowledge about edible and medicinal foraged species. Shukla presents the relevance of urban foraging in cultivating sustainable urban environments for social cohesion by balancing the risks and benefits associated.

The sixth section holds examples of how foraging could look going forward into a changing future. Diniz et al. describe three inspiring emerging initiatives linked to urban foraging, linked to improving child nutrition through school gardens, promoting sustainable urban foraging through a mobile application, and an urban greening movement in Brazil. Rupprecht et al. look at examples of community gardens, vacant lot restoration, and rewilded rooftops in Japan to start thinking of sharing our urban spaces with more-than-human foragers. Sardeshpande summarizes this journey with a light theoretical touch and offers a quick guide to safe foraging.

We hope that readers will enjoy this journey across cities, spaces, and cultures. We hope to contribute to the very urgent agenda of making cities more livable for all and to stimulate constructive dialogue on nature-based solutions. We welcome you to a world of possibilities and invite your thoughts, ideas, and dreams of a world where we forage for a better future.

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Mallika Sardeshpande obtained her PhD at Rhodes University, South Africa, and is now a research associate at University of KwaZulu-Natal, Scottsville, South Africa, and Ashoka Trust for Research in Ecology and the Environment, Bangalore, India. Her work spans the continuum between biodiversity conservation, ecological restoration, agroecology and agroforestry, environmental and food policy, human wellbeing, and urban ecology.

Shalini Dhyani (PhD) is a Principal Scientist at the CSIR-National Environment Engineering Research Institute, India. She is Asia Vice Chair and Steering Committee member in the Commission on Ecosystems Management of IUCN and Visiting Scientist at CIFOR-ICRAF.

Making Sense of Diversity of Foragers

2

Mikelis Grivins

Abstract

If foraging is considered only as a practice of engaging with wild products, then all foragers might look the same. However, if diverse knowledge claims, diverse motivations, and diverse uses of wild products are considered, then the people behind the practice start to appear very different. This chapter engages with this diversity by reflecting on my attempts to introduce a classification of foragers that would allow me to structure this diversity. To do this, the chapter raises two questions: (1) What are the categories that can be used to classify foragers? (2) What can we learn from discussing various possible classifications – first of all about foraging and secondly about ways in which scientists can work with the unknown and invisible differences within target groups. The chapter answers these questions by discussing the strengths and weaknesses of the forager classifications I have tried to apply to my work with foragers.

Keywords

Foraging · Urban · Wild resources · Consumption · Sharing · Selling

2.1 Introduction

There is a story that I first heard while interviewing foragers from Latvia that was later also repeated by respondents from Estonia (two countries sharing somewhat similar history). The story respondents shared with me was concerning the encounters they have had with part of the population that was resettled to the two countries during the

M. Grivins (✉)
Riga Stradins University, Riga, Latvia
e-mail: mikelis.grivins@rsu.lv

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period when these countries were occupied by the Soviet Union. The story was trying to make sense of different foraging approaches/preferences between them and the newcomers. A substantial number of people were moved from other parts of the Soviet Union to the two Baltic states during the period while these countries were occupied, and those who have been following the history of the Baltic states will know that topics related to politics of the Soviet Union and memories of the period are highly sensitive in the region till this day (see Vullnetari and King 2008; Agarin and Grivins 2016). In these stories, the mushroom picking newcomers from unknown corners of the Soviet Union were presented as completely ignorant and whimsical – collecting inedible mushrooms that were full of worms and carrying them in a way that mashed their appearance, thus damaging their aesthetics. As a researcher well-read in discourse theory and power relations, I interpreted these remarks as an extension of thinking about the historical events as well as a possibility for interviewed persons to stress the outstanding individual picking knowledge and uniqueness of local foraging tradition. Also, the fact that the same story was repeated in more than one interview made me cautious that the story might be based on nothing more than willingness to smear particular groups. I never really thought that these stories should be examined more closely. After all, they resembled so many other similar stories trying to present the differences between the native communities and groups of people resettled by the Soviet Union. As such, to my mind, these stories were just one more way in which people were expressing their discontent with the historical injustices.

While conducting these interviews, I was also engaging in literature review. During this inquiry, I stumbled upon an article by Peintner et al. (2013) which, among other things, suggested that there is what could be called Slavic and Romanic foraging cultures in Europe. The article elaborated that the Romanic mushroom culture is more oriented to just some specific mushroom types (more specifically chanterelles and boletes) while Slavic tradition recognizes significantly more mushroom types. This discovery made me get back in the data I gathered and reassess what I had heard. The story discussing foraging differences suddenly presented itself in a completely different light. Now the story appeared to me as a clear miscommunication between two foraging approaches. It also occurred to me that the ignorance of respondents that served as a soil for these stories was not just an ideological statement but represents much deeper differences in knowledge and completely different attitudes towards the wild products between the two groups. While respondents telling these stories were mainly looking for the aesthetically pleasing mushrooms and were not really creating real interlinkages between wild resources and diets that would incorporate wild products, people being in the center of these stories were significantly more engaged in everything wild product related. They knew more ways in which mushrooms can be prepared, were eating much broader spectrum of mushroom varieties, and in general did not care so much about how these mushrooms look.

This finding forced me to recognize two claims. Firstly, foragers differ, and these differences can be quite substantial. Secondly, the practice of foraging, regarded from a distance, might seem alike no matter who forages. Thus, we would not be able to understand these differences without really looking deeper into their knowledge and interpretations. Consequently, it might be a mistake to analyze foragers, as it is often

done, as a unified category. Underneath the practice that looks similar everywhere, we can identify diverse knowledge claims, and knowing these claims makes the practice people are engaged in quite different. An illustration of this final point is a question I have asked all respondents during my interviews I conducted between 2018 and 2019: Are there any ethical aspects of foraging that are important to them? Many of the respondents without real hesitation were saying that they are aware that they could be overharvesting the plants they are looking for and this might have a long-term impact on local ecosystems. On the other hand, there were many respondents, who even when directly asked did not identify that there could be a possibility of overharvesting or that there are any ethical issues tied to the practice at all. Not making any claims as to who is right, I just want to use this example to underline that this leads to two very different ways in which foragers can engage with nature and the factors they will take into consideration while picking wild products. Thus, if knowledge is scrutinized, we will suddenly notice differences in practice as well.

The goal of this chapter is to explore the dimensions that allow us to distinguish between various groups of foragers of edible products. I do this by discussing in this chapter two issues: (1) what are the categories that can be used to classify foragers and (2) what can we learn from discussing various possible classifications – first of all about foraging and secondly about ways in which scientists can work with the unknown and invisible differences within target groups. For this purpose, in the chapter, three different classification approaches I have consequently worked with while studying foraging and foragers are presented and discussed. This chapter reflects on the findings I have made while conducting in-depth interviews with foragers in the years 2018 and 2019. In total, 44 interviews with foragers from Latvia, Estonia, the Netherlands, and the UK were conducted. Although the ideas presented here could be attributed to other parts of the world, the chapter is mainly looking at examples from Europe. The chapter uses words forager and picker interchangeably. It also consciously uses the notion "wild product" to describe wild booty. Wild products as a notion cover all products that can be picked but are not cultivated now for picking (thus, foraging can take place in forests, but it could also take place in parks).

The chapter starts by providing a short theoretical background – it discusses the classifications of foragers that are already presented in the academic literature. It continues by providing a short overview of the data behind the presented classifications. This is followed by three propositions on how wild product pickers can be classified: based on the product they prefer to forage; based on the intended use of product; and based on their motivations and knowledge. Finally, discussion remarks on the overall challenges that must be faced when classifying foragers.

2.2 Diversity of Foragers Across Europe

While most articles discussing foraging and foragers are in fact looking at various subgroups of people engaging with wild products, very few have chosen to reflect on the differences between the chosen subgroup and broader practice of foraging (see Landor-Yamagata et al. 2018; Paddeu 2019; Nyman 2019). Despite the scarcity

of literature addressing these issues, some of the existing articles offer a good entry point to the understanding of diversity among foragers.

The already mentioned Peintner et al. (2013) suggest that there are cultural differences that allow identifying two large groups of foragers in Europe. Peintner and his colleagues' work assumes that in countries where wild products are popular, this popularity will be reflected in legal documents. This allows the researchers to suggest that the state of mushroom picking across Europe can be derived from a targeted analysis of documents regulating mushroom trade in each Europe's country. Findings from this analysis allow authors' suggesting that there are two groups of countries in Europe – mycophilic and mycophobic. The mycophobic countries are in general Romanic-speaking countries or countries with substantial Romanic-speaking minorities. In the opposite side, there are the mycophilic countries that are predominantly Slavic-speaking countries. The reference to a particular Slavic foraging tradition is reiterated by quite a few studies (see Łuczaj and Nieroda 2011). Some studies have been reiterating the same distinction in designation between the West and the East of the EU (Svanberg et al. 2012; Schulp et al. 2014; Lovrić et al. 2020).

Returning to Peintner et al. (2013), it is clear that the distinction is very important as it helps to grasp the differences in diversity of wild products consumed between various cultures. Still the assumption that the relevance of the wild products will be reflected in the trade regulation could and should be approached cautiously. Firstly, clearly regulations will not always reflect the public appeal of a phenomenon. Second, because of the focus on regulations, the abovementioned study was forced to use borders of countries to designate foraging cultures. This approach, although it seems like the most obvious way to divide different cultures, misses the nuances that can be observed on the ground level. Even more importantly, there are a great number of articles (see Landor-Yamagata et al. 2018; Paddeu 2019; Nyman 2019) describing smaller groups of foragers (communities of pickers) representing a region of the country or sometimes even crossing the borders of countries that have highly intensive engagement with wild products. Focus on countries, although helpful, makes us not to notice these groups that are exploring wild products. Foraging is not a phenomenon that aligns itself with national borders.

Wiersum et al. (2018) use results of the work conducted by Cesaro et al. (1995) and propose a more detailed distinction of diversity of European regions. Wiersum et al. (2018) identify five main orientations of non-timber forest product (NTFP) potential: (1) production of NTFP as cultural resources, (2) forest enterprise development, (3) regional development, (4) development of common pool resources, and (5) production relevant to bioeconomy. After assessing the importance of the orientations in the five regions (Northern Europe, Atlantic Europe, Central Europe, Southeast Europe, Mediterranean), authors conclude that concepts like culture, identity, and self-actualization are crucial to understand the role these products have in all five of the regions. It is worth pointing out that the five orientations clearly designate the distinction between commercial potential of wild products and other possible motivations foragers might have. Although Wiersum et al. (2018) do not delve too much in addressing the differences between commercial and noncommercial foraging, it is crucial that this distinction is made.

Foraging has always been strongly related to tradition and values (Grivins 2021). However, if the focus is shifted from a spatial distinction of foraging cultures to engaging with the change the tradition has had over time, one most likely will notice that the meaning of the orientations suggested by Wiersum et al. (2018) is changing. Łuczaj et al. (2012), in an article "Wild food plant use in 21st century Europe," distinguish between what could be described as the fading heritage foraging and currently emerging new foraging traditions. Engagement we have with nature – and consequently with wild products – tends to change over time. In the case of wild products, in general, we can observe across various cultures a drop in the diversity of products that are used by local communities (Łuczaj et al. 2012; Grivins 2021). Several reasons can be presented for this trend. However, the overarching argument seems to be that shift from traditional and rural to modern and urban has caused a shift in significance and role these products have – they are not so much seen as products anymore as they are tied with experiences or services (Reyes-Garcia et al. 2015). This finding has been rephrased by Wiersum (2017) who suggests that the new foraging tradition cannot be regarded as an extension of the old product-oriented approach as it is based on a completely new way of rethinking engagement with nature. Although this observation is hard to argue with, it sits uneasily with evidence from countries (for example, Latvia, Estonia, Finland) that still have a high share of foragers who jointly collect huge quantities of wild products (for examples, see Grivins 2016; Vidale et al. 2015). In many of these cases, it is clearly a historical tradition that has helped maintain the close relations between communities and wild products (as has been illustrated by Bardone and Pungas-Kohv 2015).

These theoretical considerations offer strong starting point to engage with ways to classify foragers. The literature illustrates that when it comes to foraging, there are differences between countries. However, links between society and the wild are going through constant transformation, and we are witnessing new foraging traditions emerging (Łuczaj et al. 2012; Grivins 2021). This process is taking place differently across Europe. Finally, on top of these considerations, it should be kept in mind that wild products are also part of lucrative market, and this cannot be overlooked when thinking about differences between foragers.

2.3 The Data Used in the Chapter

This chapter follows my attempts to develop a better way to structure the diversity of foragers. It focuses on two tasks simultaneously – it asks how to structure diversity and tries to capture conceptual challenges that arise while working on a comprehensive classification of foragers. Because of this, this chapter takes somewhat an unconventional structure. At its core – it follows and discusses the findings of my research at different stages of my work.

The chapter is based on in-depth interviews conducted in 2018 and 2019. The interviews were conducted in Latvia (30 interviews), Estonia (3 interviews), the UK (5 interviews), and the Netherlands (6 interviews). All 44 respondents were occasional and professional foragers. However, they have been selected so that they