

# Contents

---

1	<b>What is Urban Nature?</b> .....	1
1.1	What Does "Green City" Mean? .....	2
1.2	What Does Urban Nature Mean? .....	7
1.3	Components of Urban Nature .....	10
	References.....	16
2	<b>How Urban Nature Developed?</b> .....	19
2.1	Urban Nature as a Cultural Product .....	20
2.2	Urban Nature Is Establishing.....	29
2.3	Public Urban Nature for Beautification, Recreation, Public Health and Public Education .....	33
2.4	The Park Cemetery – A Place of Recreation for the Living .....	44
2.5	The Urban Forests and Forest Parks – How the Forest Stayed in the City .....	47
2.6	The Private Garden for Everyone Complements the Public Urban Nature.....	51
2.7	How the Waters Became Urban? .....	58
	References.....	64
3	<b>How Urban Nature Exists in the Context of Nature and Culture?</b> .....	69
3.1	The Relationship Between City and Natural Environment.....	71
3.2	Example Forest City: Integration into the Natural Environment .....	77
3.3	Example Desert City: Turning Away from the Natural Environment .....	78
3.4	Example Mountain City: Dealing with Extreme Natural Environment .....	82
3.5	Forest and Wilderness in the City: Places for Religion and Rituals.....	89
3.6	Gardens and Parks: Designed Nature for the Urban Recreational Landscape .....	93
	References.....	99
4	<b>What Services Urban Nature Provides?</b> .....	101
4.1	What Ecosystem Services Do We Expect From Urban Nature? .....	102
4.2	Which Urban Natures Provide What Kind of Ecosystem Services? .....	117
4.3	How Can Urban Ecosystem Services Be Valued? .....	124
	References.....	127
5	<b>What Urban Nature Provides Which Services?</b> .....	131
5.1	The Urban Park.....	132
5.1.1	Natural Element Urban Park.....	132
5.1.2	Services of Urban Parks.....	137
5.2	The Urban Tree Population (Urban Forest) .....	147
5.2.1	Nature Elements, Urban Trees and Urban Woodland .....	147
5.2.2	Services Provided by Urban Trees .....	152
5.3	The Urban Gardens .....	174
5.3.1	Natural Element Urban Garden.....	174
5.3.2	Urban Gardens as Services Providers.....	188

5.4 Urban Waters ..... 200

5.4.1 Natural Element Urban Waters ..... 200

5.4.2 Services of Urban Waters ..... 204

5.4.3 Restoration of Ecosystem Services of Urban Waters ..... 208

References..... 217

6 What Constitutes Urban Biodiversity? ..... 229

6.1 Urban Biodiversity: A Paradigm Shift? ..... 230

6.2 How Can Urban Biodiversity Be Measured? ..... 234

6.2.1 Integration Levels of Biological Diversity ..... 234

6.2.2 Structure of Urban Habitats as Indicator and Basis of Spatial Assessment..... 235

6.2.3 Species Diversity as Indicator ..... 238

6.3 How Is Urban Biodiversity Perceived? ..... 244

6.4 Urban Biodiversity and Ecosystem Services ..... 249

References..... 251

7 What Constitutes Urban Nature in the Green City Concept? ..... 255

7.1 The Green City, a Conceptual Mosaic of Action Objectives ..... 256

7.2 Green Infrastructure: The Local Basic Concept ..... 263

7.3 The Concept of Urban Biodiversity ..... 266

7.4 Wild Goes Urban: Wilderness as Part of Urban Nature..... 283

7.5 The Green City Concept in European and Global Perspective..... 302

References..... 309

8 What Ways Are There to a Green City? ..... 315

8.1 The First Steps ..... 317

8.2 Maintain, Gain and Connect Space for Urban Nature..... 321

8.3 Making Urban Nature Accessible to All ..... 328

8.4 Enhancing the Benefits of All Types of Urban Nature..... 333

8.5 Making Urban Nature a Space for Experiencing Nature and a Learning Place..... 337

8.6 Protecting and Using Urban Nature ..... 346

8.7 Using Urban Nature for Climate Moderation..... 359

8.8 Solving Problems and Reducing Risks with Urban Nature – Nature-based Solutions (NbS) ..... 362

8.9 Providing Guidance Through Good Examples ..... 367

References..... 379

Supplementary information

Index ..... 387