

Urban Agriculture Europe

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(eds.)



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4.3

Urban Agriculture and Cultural Heritage: A Historical and Spatial Relationship

Paola Branduini, Raffaella Laviscio, Lionella Scazzosi, Jan Supuka, Attila Tóth

The relationship between the city and agriculture has a long history: the agricultural landscape around cities has always been a place of food production and recreation. Before the globalization of the market during the second half of the twentieth century, rural surroundings were the daily food supplier for city dwellers. Vegetables, fruits, cereals, and animal products were sold in the markets located in the main squares of the city.

Historically, the countryside not only had a productive function, but was also a recreational area. At the end of the nineteenth century, cycle excursion guides were published for Parisians who wanted to enjoy the rural amenities (Csergo 2004). Milanese people in the 1930s are shown on a boat promenade in the agrarian landscape along the Navigli, Milan's agricultural and commercial water channel (Figure 4.3.2). Since former rural areas have been absorbed by expanding cities, Urban Agriculture may now be carried out where it had been for centuries. Today, some of these areas are of historic value and tie the agricultural production closely to cultural heritage issues.



Sergio Bonriposi
President of Cascina
Cuccagna citizens
association, promoter
of the first social reuse
of a historic agricultural
building in Milan

'As callous citizen I perceived the countryside as an undefined space that begins where urban construction, cement, asphalt and shops end. Everything changed when the first farmers markets in Milan made me think and I began to consider the country as a source of food. I began to perceive the countryside as the place created by the wonderful infinite combination of seeds, earth, water, and light. It was as if my eyes could embrace the whole world, rather than my little piece of reality essentially made of walls.'

In the nineteenth century, the north horticultural fields (Huerta) of Seville supplied the markets at the gates of the historical wall (Valor Piechotta and Romero Moragas 1998; also Figure 4.3.1); the vegetables of Hurepoix reached the market in Paris Les Halles via the Arpajon tramway; and every morning horticultural farmers brought fresh products and milk from outside the bastions of Milan to Verziere square, behind the Duomo cathedral.

Cultural Heritage: From Outstanding to Everyday Landscapes

The concept of cultural heritage has been elaborated by a number of institutional and non-institutional bodies at different levels, such as UNESCO, the Council of Europe, and ICOMOS. Cultural heritage is a complex concept that involves tangible and intangible components, as well as historical and contemporary values (UNESCO 1972 a). Tangible heritage pertains to the material elements of the agricultural landscape, to their historical authenticity and their physical permanence through time. Intangible heritage pertains to the significance attributed by people to places, techniques, and skills that have enabled the creation of landscapes and to features dictated by economic and behavioural factors. The 'aesthetic value' pertains to aspects perceived by human senses and cultures (UNESCO WHC 2013; Laviscio and Scazzosi 2014).



All of these values enhance people's lives and benefit society because they contribute to a sense of place. Historically, this has been cited as a justification for preservation in a number of different documents (ICOMOS 1931, 1964; UNESCO 1972 b; ICOMOS Australia 1999). In these documents, 'cultural significance' is defined as an important characteristic of place, because it brings '... aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups' (ICOMOS Australia 1999: art. 2).

It is common to associate cultural heritage with outstanding landscapes; UNESCO recognizes many rural landscapes as World Heritage sites,

defining them as an 'organically evolved landscape' and, more precisely, a 'continuing landscape ... which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time' (UNESCO WHC 2013: art.10 ii).

However, cultural heritage is also linked to everyday landscapes and even to abandoned areas. The European Landscape Convention defines a 'landscape' as a product of the action and interaction of natural and/or human factors (Council of Europe 2000: art. 1), underlining people's perception. It equates landscape to the whole territory, including 'natural, rural, urban and peri-urban areas' (ibid.: art. 2), and 'concerns landscapes that might be considered outstanding as well as everyday or degraded

4.3.1

Plan of Seville in 1890. Horticultural fields (in green) provide vegetables for the city.



4.3.2

4.3.2
Recreational trip on the channel Naviglio Grande, used for transportation and irrigation (1930)



4.3.3

4.3.3
Large vineyard plot close to family house in Zobor, Nitra

4.3.4
Descriptors and evaluation criteria for heritage agricultural landscapes

landscapes' (ibid.). The view of a landscape as a cultural heritage site is determined by an increasing understanding of the non-material (intangible) dimension and the dynamics of memory associated with physical objects and structures, which helps to appropriate the identity of places from different generations and social groups.

Agricultural Heritage Landscape Features

Regarding agricultural landscapes, cultural heritage can be recognized in different tangible features, such as the agrarian morphology and structure and the rural habitat (Lebeau 1969). The agrarian morphology represents ways of surface modelling agricultural land in order to optimize its use, depending on the orography and exposure of the place. It can include the following measures and elements: the improvement of capacity to retain rain water, by regulating the runoff of surface water; the system of irrigation; and hard components, such as terraces, paths, and stairs. The rural habitat can include traditional building materials and typologies. Intangible aspects—such as specific agrarian practices, cultivation techniques, and ways of processing products—confer characteristic properties to agrarian landscapes. Furthermore, customs and traditions add a symbolic dimension. Intangible features are also determined by landscape variety, colours, or characteristic sounds and smells, which contribute to defining the 'scenic value' of a place (Figure 4.3.4).

Cultural Heritage Improving Urban Agriculture

City expansion frequently led to reducing the extent, structure, and crop variety of agricultural land at the city fringes, decreasing traditional landscape features.

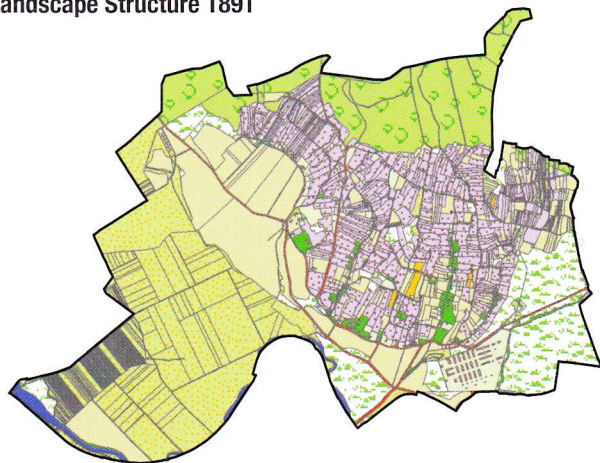
There are areas where this erosion is more evident, such as in the Ruhr Metropolis, consistently transformed during the second half of the twentieth century by the coal and steel industry; or in the Dutch agrarian landscape, deeply and largely transformed due to the heavy industrialization of agriculture in the twentieth century (see the Ruhr Case Study).

In other European areas, features or elements of landscape heritage can still be found in large parts of the agricultural landscapes. The diffusion and quality of conservation of such cultural attributes have an impact on the perception of landscape for all types of Urban Agriculture.

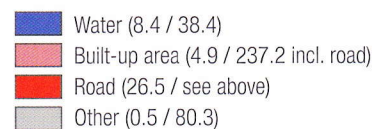
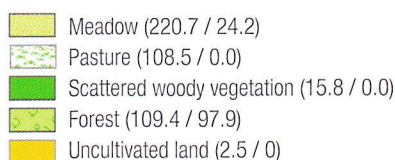
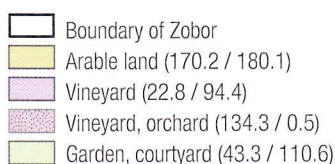
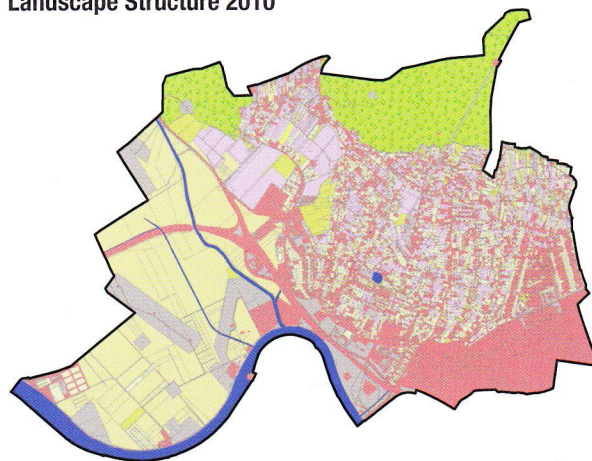
In Milan South Agricultural Park (see the Milan Case Study), irrigated meadows and rice fields are the remains of an ancient and complex system of agricultural production, made of an extensive network of canals, specific land modelling, and small and dispersed hydraulic structures for water regulation. Some hydraulic artefacts date back to the thirteenth century and maintain the memory of traditional medieval cultivation techniques—such as the *marcita*, a meadow irrigated also in winter. Those and other remains of the historical agricultural system of Milan South are often the starting point for the development of urban farming with a cultural historic emphasis.

		Descriptors	Evaluation Criteria
Features	Rural Habitat	Habitat patterns (nuclear village, dispersed settlement) Relation with the morphology of the land (alignment to the contour lines, parallel or perpendicular distribution to the lines of maximum slope) Typology of the buildings Materials and colours	Authenticity Integrity Rarity Uniqueness Legacy
	Agrarian Morphology	Size of the plots or fields Shape of the plots or fields Shape and materials of components as terraces Regularity and repetition of shapes Alternation of tree crops and arable crops Shape and materials of the irrigation and drainage canals Shape and materials of vertical and horizontal links (stairs, ramps, paths) Shape given to the ground to make cultivation possible, disposition of the fields in relation to farm roads, forests, grasslands, irrigation systems	
	Agrarian Structure	Agrarian practices Cultivation techniques Economic systems Property ownership/tenancy Multiple use Typicality Production organization Social organization Ethnoanthropological characteristics	
	Cropping System	Type of crops / Tree and arable crops association Climate Sun exposure Altitude Crops/livestock techniques	
Scenic Value		Landscape variety (woods, hedgerows, rows, irrigation canals, mixed crops) Fragmentation (open/closed, small/large, snug/wide) Alignments, backcloth, depth, etc. Colours, visual changes with seasons (e.g., leaves) Sounds related to the handling of agricultural machinery, wind, water, insects, birdsong, animal noises Smells (perfume/odour) Seasonal smells of plants and animals	Recognizability Spatial articulateness Shape certainty Monotony or variety Concentration or dispersion Rarity and uniqueness Tranquillity or excitement Harmony Rhythm and gradation Statics and dynamics Dominance or subordination
Symbolic Value		Customs and traditions Typical products References in literature, painting, sculpture, films, photos Sentient landscape forms (such as sacred mountains in Asia, water pools, subak system, etc.)	Representativeness Legacy Uniqueness Perceptibility

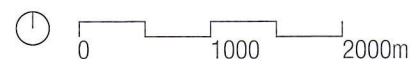
Landscape Structure 1891



Landscape Structure 2010



(hectares 1891 / hectares 2010)



4.3.5

Landscape structure in Zobor, Nitra, 1891 and 2010

On the Femegro farm, for instance, the milking robot was gently introduced into the old building instead of the milking parlour without demolishing any part of the historic building; on Tavernasco farm, historical canals are maintained in order to keep up the *marcita* (water-meadow) and to produce grass for feeding an integrated livestock. The maintenance of historical features and techniques is proudly demonstrated to the public, who come to buy local food products.

In large parts of the Dublin periurban area, the morphology and the climate have contributed to a centuries-old tradition of horticulture related to a market gardening tradition. Recently, it was transformed in many periurban agricultural enterprises (see the Dublin Case Study). In the Greater London region, the permanence of pastures and meadows structured by hedgerows and small woodland gives evidence of a long territorial transformation. The development of urban farms in these areas allows preservation of the landscape and heritage value. It is recognized by people and meaningful for their identification with the landscape. Many types of Urban Agriculture can benefit from the beauty and added value of cultural heritage, especially if

the aim is to embrace social and cultural functions. For instance, the Woodland Farm Trust in Welling is an educational farm aimed at enhancing the historical and traditional landscape in which it is located (creating paths through the historic woodland, teaching how to plant and construct a traditional hedgerow, providing historical information about the place with leaflets, and so on).

Often, agricultural heritage features are still visible in the remnants of cities' productive green belts, close to the dense urban fabric that usually developed at the end of the twentieth century. In Palermo, the ancient Arabian terraces—on which Ciaculli (a variety of mandarin trees) are cultivated—are part of the larger Gold Basin on the periurban eastern side of the city and form a cultural landscape; the landscape quality is used to support a producers' cooperative in marketing their produce under a high quality brand. In the Zobor area of Nitra, vineyards form a very characteristic landscape located on the sunny slopes in periurban zones. Remains of vineyards can be found in family gardens and on small farming plots; grapevines are grown on pergolas or espaliers, together with local fruit trees such as almonds, chestnuts, mulberries, or rowans.



4.3.6



4.3.7

They form a specific mosaic of agrarian structures that add a scenic quality to an everyday residential area. Events and historical celebrations like the Feast of St. Urban, patron of vineyards, reinforce the sense of belonging to a long-standing community (Točka 2014, Figures 4.3.3, 4.3.5).

Traditional, rural conglomeration contributes to preserving the historic character of periurban productive belts—such as in the Gallecs area of Barcelona, where the landscape is formed by small farmsteads on small fields, with a variety of vegetable and animal production. Lines of old trees and hedgerows structure the landscape and family houses, and farm buildings are made with traditional materials and techniques, which have been constantly adapted—and along with practical knowledge—passed on for generations.

Another place where cultural and agricultural activities coexist is the Linterno farm located in the Milan periurban area. Built between the sixteenth and nineteenth centuries for animal breeding and horticulture, it is now a municipal property and a site protected by law. Buildings are being restored and transformed into a cultural centre, a local newspaper archive, a venue for a beekeeper's activity and his educational farm, a farmers' market, a public historic oven, and common spaces for food gardeners. Some meadows are traditionally cultivated thanks to local farmers, and traditional techniques are disseminated by a cultural association (Figures 4.3.9 to 4.3.11).

In each agrarian morphology and structure, the specific cultural significance goes beyond the type of cultivation (crops, fruits, vegetables). Many local types of urban farming and food gardening

continue to use traditional agricultural methods and take advantage of the cultural significance of their place. This continuity helps to raise public awareness of the value of agriculture and of the value of cultural heritage. On the other hand, heritage features or historical and scenic values often appeal to many citizens, and thus create additional benefits for Urban Agriculture.

Urban Agriculture Enhancing Cultural Heritage

Urban food gardening and urban farming can perform cultural services for society—maintaining traditional cultural landscapes and their components, crop varieties, and cultivation techniques—and transmit customs and traditions.

Until the end of the twentieth century, historic rural buildings in intra- and periurban areas could be more easily changed, removed, or rebuilt for social services, housing, and commerce. Since the new millennium, the desire to preserve historic buildings and landscapes and the intention to maintain or reintroduce agricultural functions are increasing. A case in point is Cascina Cuccagna in Milan, a municipal farm transformed a century ago into a tavern surrounded by buildings without agricultural land and production, and now a civic centre with facilities related to agriculture, such as a farmers' market, a local food restaurant, a community garden, and gardening and agricultural workshops for adults and children (Figure 4.3.6).

Squatters can also implement Urban Agriculture: vacant or abandoned public spaces are frequently appropriated by groups of people who defend them from demolition or new construction and

4.3.6

Cuccagna farm in Milan restored as a civic centre in the urban fabric

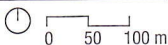
4.3.7

Fence made of local materials, cane and willow, between the community garden and the road. Can Mas Deu, Barcelona

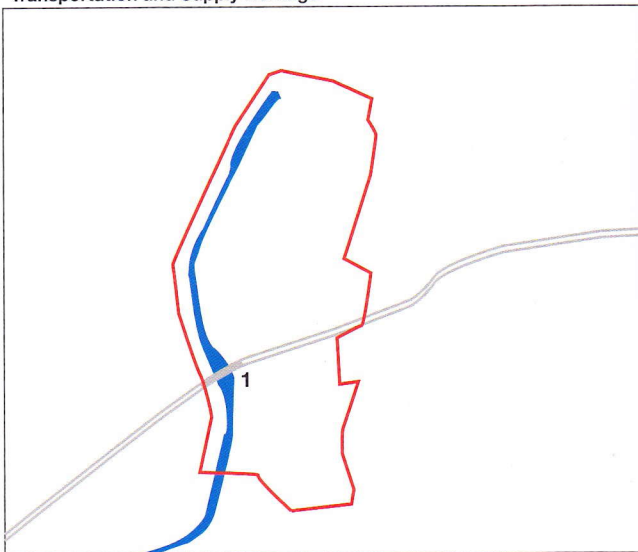
General Situation



2011 Instituto de Estadística y Cartografía de Andalucía



Transportation and Supply Heritage



— Miraflores road and Tagarete bridge (1): 14th c. connection to Seville Intramuros city, today connecting the park with the city centre
 Tagarete River

Built Heritage

Past Uses	Current Uses
Hacienda de Miraflores 14th c. Mudejar Tower 16th-17th c. dairy farm 18th c. olive oil mill	Workshop Educational use
Secador Tobacco dryer	Educational use since 1983
Water tank, water wheel, Casa de las Moreras 16th-17th c. irrigation system and building for water control	Educational use
Finca de la Albarrana 13th c. dairy farm 19th c. vegetable farm	Educational use since 1983
Water Mill 16th-17th c.	Educational use since 1983

Agricultural Heritage

Past Uses	Current Uses
Irrigated fields for fruits and vegetables (19th c.)	Allotment gardens (since 1983)
Irrigated fields for fruits and vegetables (19th c.)	Educational gardens

4.3.8

4.3.8

Historical and current
uses in Parque de
Miraflores, Seville

4.3.9

Evolution of roads, water
channels, buildings, crops,
agricultural techniques in
Cascina Linterno, Milan
(1722, 1864, 1946)

transform them into living spaces, reusing and valorizing spatial qualities and features. For instance, Can Masdeu in Barcelona is an example of squatting in the abandoned area of a former hospital and, through gardening, converting it into a vivid semi-public area with new functions and visions (Giacché and Tóth 2013). In other squatted areas—like Huerto del Rey Moro in Seville and Cascina Torchiera in Milan—the necessity of providing food without energy and water supply from the city creates the necessity for sustainable solutions, which begin by exploiting available historic resources (Figure 4.3.7).

Here, the act of preserving landscape features is an internal need instead of an external output.

Transforming redundant historical farmsteads in metropolitan areas can serve as a basis for Urban Agriculture. Food gardening and farming can establish a bond between the former and future functions, and can add the role of food production to the open space as well as new functions to the buildings.

A relevant example would be the establishment of new allotment gardens by a municipality in a former rural site, such as the allotments gardens in Badalona, in the Barcelona Metropolitan Area.

Farm-Field System 1722

Aratorio

The cereals are carried to the barnyard to be dried

They are stocked in the granary

They are used for self-consumption and sale to the city market

Prato

The grass is partially cut and used to feed cattle

Some of it is dried on the field

The hay is carried to the barn and used to feed the cattle

Aratorio Avitato

The grapes are carried to the barnyard

They are pressed to produce wine for family consumption

Farm-Field System 1865

Prato Adacquatorio

Aratorio

Orto

The vegetables are picked seasonally

Consumption and sale to the city market (Verziere)

Farm-Field System 1946

Marcita

The *marcita* produces grass for feeding cattle, in winter

The milk is sold to the milk factory (Centrale del latte) and used to make cheese

Prato Adacquatorio

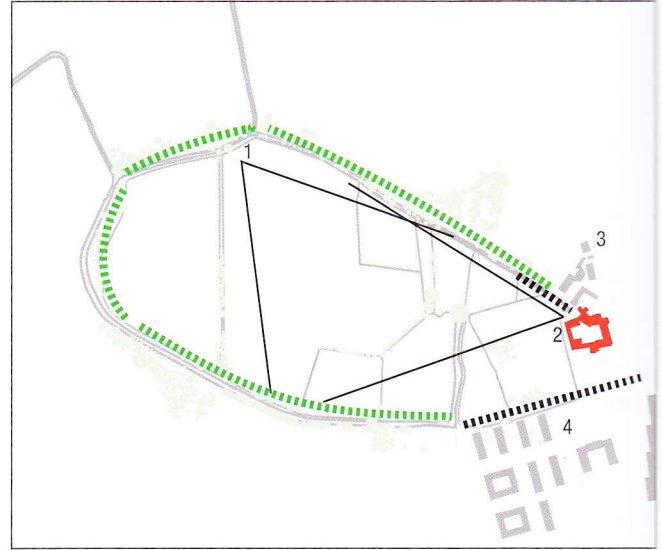
General Situation



2012 AGEA Regione Lombardia

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Visual Relations



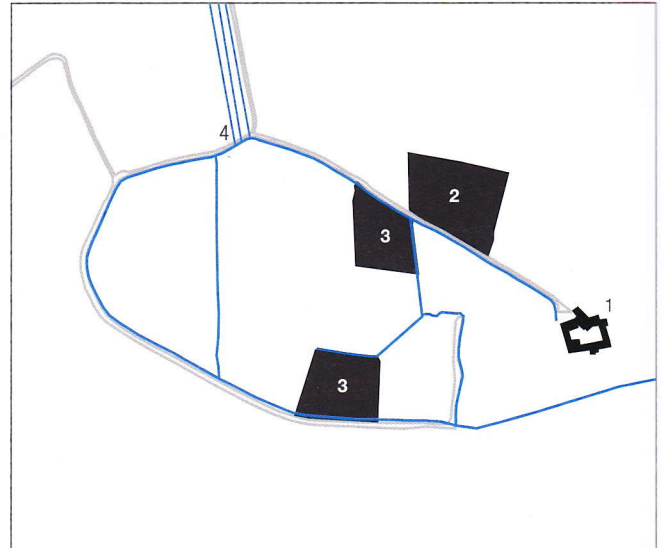
- Built barriers: low-rise housing part of the historic cluster (3), multistorey housing (4)
- Vegetation barrier
- < Viewpoints: visual interrelation between traditional meadows (1) and farmstead (2)
- Cascina Linterno: historic landmark

Tangible Heritage Permanencies



- Roads existing since the 18th c.
- Cascina Linterno, farm building documented since the 18th c., partly supposedly existing since the 14th c.
- Agricultural parcels, documented since the 18th c.
- Tree rows documented since the 18th c.
- Canals, documented since the 18th c.

Intangible Heritage Permanencies



1. Oral traditions (home to Petrarca poet, presence of the miraculous healer Pre' de Ratanà); oral memory (of rural customs and pre- and post-war farmstead life) religious traditions (functions in the small church and farmyard)
2. Field used for the ongoing tradition of the "Falò di S. Antonio" bonfire
3. Traditional *marcita* meadow cultivation technique
4. Oral knowledge on former irrigation management techniques

4.3.10



4.3.11

They are situated on the agricultural terraces of an ancient cloister and give a sense of continuity to the space. They use old production features, like the terraces, as well as a handmade hydraulic system and hedgerows to protect the vegetables. A similar situation has occurred on the Miraflores farm in the periurban area of Seville, which is surrounded by social housing. In 1983, the association ProParque Educativo de Miraflores took over the management of the abandoned vegetable fields and the rest of the ancient structures (twelfth-century farm buildings, a bridge, an olive mill, a well, and a pool dating back to the seventeenth century). They reused the built heritage for school workshops and took care of the agricultural fields by introducing allotment gardens and educational gardens for children and adults. Educational activities guarantee the transmission of the cultural values of the agricultural site. The geometric parcelling of uniformed plots, as well as the variety of local fruit, vegetables, and ornamental plants provide a high scenic quality (Branduini 2015) (Figures 4.3.8). Urban farmers can contribute to maintaining intangible heritage and in return benefit from it. The whitening of cardoons made in an old cellar and directly sold at the farm's market is a traditional technique maintained by the young vegetable farmers managing the Budé farm in the centre of Geneva (see the Geneva Case Study). Thus, they use traditional techniques to sustain the economy and safeguard intangible heritage.

The common denominator of these experiences is the role in raising awareness taken by the actors of Urban Agriculture: they reach a large public in the dense urban fabric, where they can spread cultural knowledge and benefits.

Cultural Heritage and Agriculture: A Possible Synergy

Three main factors constitute the cultural heritage of an Urban Agricultural landscape: landscape qualities, which determine how the landscape is seen, perceived, and interpreted by people; historic landscape characteristics, which constitute the present-day physical pattern; and historic landscape traditions, with respect to techniques and customs still in use.

Mutual benefit can be achieved if cultural heritage is acknowledged and respected as a key factor and resource in the transformation of the landscape. The examples discussed in this chapter show that Urban Agriculture can play an active role in the conservation and transmission of agricultural heritage—tangible and intangible, outstanding and everyday—and at the same time meet the actual needs of the people.

4.3.10

Tangible and intangible heritage in Linterno farm, Milan

4.3.11

A guide explaining the technique of maintaining *marcita* (intangible heritage) and the mutual relation between farm and fields