

Urban Wilderness in Central Europe

Rewilding at the Urban Fringe

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Wilderness is a popular concept in central Europe, although extensive natural areas where human management has either never occurred or ceased centuries ago are lacking. Wilderness areas tend to be small and isolated, and often currently in the process of rewilding; therefore, wilderness and rewilding must be viewed in a specific central European context. As Leopold (1942) notes about the value of small wilderness: “One of the symptoms of immaturity in our concept of recreational values is the assumption, frequent among administrators, that a small park or forest has no place for wilderness. No tract of land is too small for the wilderness idea. It can, and perhaps should, flavor the recreational scheme for any woodlot or backyard” (pp. 24–25).

Introduction

In most regions of Europe, including the British Isles, extensive pristine wilderness areas are lacking, if judged by the criteria contained in the U.S. Wilderness Act or by the International Union for Conservation of Nature and Natural Resources (IUCN) wilderness classification (EUROPARC and IUCN 2000; Carver et al. 2002). Nevertheless, a number of isolated wilderness areas exist in relatively remote locations throughout central Europe (Germany, Austria, and Switzerland). They are often synonymous with national parks of which they comprise core zones, where human impacts were historically minimal or, where management activities have been halted. Although a number of these



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national parks were established in the 1990s, it is unlikely that a substantial number of new reserves will be established in the near future due to the large land areas required and associated management constraints.

Concurrently, a number of local initiatives were started by conservationists, foresters, NGOs, and local public agencies, which have led to the independent establishment of urban wilderness areas in central Europe to complement the more remote national parks (Held and Sinner 2002). There are analogous efforts within the IUCN to address the issue of urban parks (McNeely 2001). In the following sections we introduce the underlying ideas, concepts, and potential functions of established and proposed urban wilderness areas in central Europe.

Wilderness, Rewilding, and Scale

As mentioned previously, extensive pristine wilderness areas are lacking in Europe. Although there is ample evidence of extensive human influence in the shaping of so-called



Figure 1—Abandoned railroad yard in the rewilding area Schöneberger Südgelände in Berlin, Germany. Photo by S. Hofmeister.

pristine North American wilderness (Olwig 1995; Schama 1995), the ideal of pristine and untrammeled wilderness formulated in the U.S. Wilderness Act (1964) still prevails (Cole and Landres 1996). In practice, however, the wilderness criteria associated with IUCN classifications are applied pragmatically, and difficulties in defining natural states of ecosystems prior to human settlement are acknowledged (EUROPARC and IUCN 2000). Briefly, wilderness is viewed as an area, where natural processes are permitted to operate without human interference.

Throughout Europe, the establishment of wilderness inevitably involves the process of rewilding. Yet rewilding is perceived differently in Europe than in North America. Although the reintroduction

and immigration of large carnivores commands great interest and controversy throughout Europe, the rewilding issue goes far beyond wildlife habitat. Big wilderness (Soulé and Noss 1998), rewilded or not, is unfeasible in central Europe.

From Species to Processes: Conservation in Central Europe

In central Europe, virtually all seminatural landscapes are the products of centuries-old, traditional agricultural, hydrological, and silvicultural management regimes. These human efforts have resulted in habitats with high biodiversity and many rare or endangered species (e.g., fens, calcareous grasslands). Many of these unique and species-rich habitats are threatened as a result of land-use changes associated with the intensification of agriculture, urban development, and anthropogenic impacts. For example, more than 90% of Swiss wetlands have been destroyed since 1850. Consequently, nature conservation during the past decades has focused primarily either on the preservation of rare or endangered species, or, more recently, on the maintenance of threatened seminatural habitats, characterized by high biodiversity and/or presence of endangered species. These two approaches are termed static, since the preservation of a status quo or an ideal are the primary management objectives. Despite their virtues and successes, these approaches are highly dependent upon subsidies to landholders and managers, which may not be available in the future (Eissing 2002).

More recently, a third, dynamic approach has gained momentum, which emphasizes processes rather than static preservation (Scherzinger 1997; Jedicke 1998). Here, the maintenance or reestablishment of natural processes, including vegetation succession, floods, wind throws, and insect calamities, are explicitly tolerated. Reestablishment of natural processes also implies rewilding, since management is effectively terminated. In most habitats this process will result in secondary succession toward wilderness. In some instances, the consequences of rewilding may include the disappearance of certain habitat types and even reductions of overall biodiversity. Furthermore, for some ecosystems there are no clear conceptions of the composition or appearance of the future wilderness state. Consequently, rewilding (*Verwilderung*) is a controversial issue, not only among natural resource professionals and conservationists, but also among the general public.

A case in point is the national park Bayerischer Wald in Germany where widespread diebacks of spruce forests occurred due to drought and beetle infestations during the 1990s. These diebacks led to public protests reminiscent of reactions to the wildfires and the “let burn” policy in Yellowstone National Park during 1988. Yet, in time, attitudes of both the public and some critical foresters changed as the restorative powers of ecosystems became evident through widespread forest regeneration, as predicted by conservation professionals. Hence, public acceptance of rewilding rises once the dynamic properties of ecosystems are understood and appreciated.

Rewilding is also relevant outside of national parks or reserves. Outside parks, rewilding is bound to increase significantly in marginal forest and

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agricultural lands. Present efforts by federal agencies and the European Union to take cropland out of agricultural production and future projections of these agricultural policies indicate that abandonment and hence rewilding of agricultural lands will increase dramatically in the near future, particularly in regions where soils are marginally productive (Eissing 2002). It is presently unclear if and how these extensive agricultural rewilding areas will be administered. Similar trends, albeit driven by different constraints, can be projected for the field of forestry.

Urban Wilderness in Central Europe

Aside from established national parks and abandoned agricultural and forestlands, where ecosystems are developing into wilderness, other types of wilderness are present in central Europe—albeit at appreciably smaller spatial scales than recognized by current IUCN criteria (i.e., less than 1,000 hectares [2,470 acres]). These wildernesses include steep canyons or ravines, remote wetlands, inaccessible as well as abandoned orchards, or vineyards in suburban and rural areas. In addition, abandoned industrial areas, rail yards, former borderlines (such as sections of the former Berlin Wall), unused lots, and recreational parks are rapidly developing into urban wilderness. These urban wilderness areas are highly diverse, not only biologically, but also in spatial extent. Only few have a legal status guaranteeing permanence. Consequently, a multitude of uses exists, spanning the extremes of recreational playgrounds or picnic areas to imperious and thus solitary thickets. Yet, in all examples, parts of the area are rewilding. We propose the following classification to characterize various wilderness areas (see Table 1).

Table 1—Proposed Classification of Wilderness in Central Europe.

Designation	Description	IUCN Status	Purpose
National Parks	Reserves distant from human habitation, large areas (> 1000 ha).	II, Ib	Biodiversity, ecological services, large carnivores, recreation, research
Urban wilderness	Reserves close to urban centers and/or urban areas (≤ 10 km distance), smaller areas (< 1000 ha). Remnants of wilderness or areas with low human impact.	None, but desirable by both IUCN and national agencies.	Biodiversity, recreation, ecological services, research
Urban and rural rewilding areas	Abandoned urban, industrial or agricultural sites (< 500 ha), including rail yards, former coal mining areas, former agricultural fields.	Not needed. Regional or national legal status desirable.	Biodiversity, education, ecological processes (e.g., plant succession, invasions), recreation, research
Rewilding microcosms (urban and rural)	Small areas (\leq several ha), such as private and public gardens, canyons, edges of parks, streams or ponds.	Not needed. Local legal status desirable.	Biodiversity, recreation, ecological processes

Adapted from Meyer et al. 2002.

Table 2—Examples of Urban Wilderness Areas in Central Europe.

Name	Location/Country	Age	Area (ha)	Habitat	Former Use
Faberwald	Nürnberg, D	1981	20	Mixed deciduous forest	Recreation
Sihlwald	Zürich, CH	1993	820	Mixed deciduous forest	Silviculture, recreation
Stadtwald	Lübeck, D	1994	479 in four sites	Mixed deciduous forest	Silviculture, recreation
St. Arnualer Wiesen	Saarbrücken, D	1995	45	Grassland, open forest	Meadows, landfill
National Park Donau-Auen	Wien, A	1996	8,800	Floodplain, deciduous forest	Recreation, silviculture
Wilder Industriewald/Brachewald	Ruhrgebiet, D	1995–1999	100	Mixed birch and willow stands	Coal mines, spoils
Schöneberger Südgelände	Berlin, D	2000	18	Various stages of succession	Railroad yard
Steinbachtal-Netzbachtal	Saarbrücken, D	2002	1,000	Mixed deciduous forest	Silviculture, recreation
Goldachtobel	St. Gallen, CH	proposed	430	Stream, ravine, mixed deciduous forest	Silviculture, hydroelectricity, hunting, recreation

Of primary interest here is urban wilderness. During the last decade a number of urban wilderness areas, predominantly forests, have become established in Switzerland, Germany, and Austria (see Table 2). The most prominent example is Sihlwald, located in the vicinity of metropolitan Zürich

(Christen 2002), a mixed deciduous forest formerly managed for timber and wood production that is reverting to wilderness. As for most other urban wilderness areas, no definitive legal status exists for Sihlwald. Currently, the Swiss legislature is preparing amendments that would provide recognition as well as



Figure 2—Goldachtobel—a proposed urban wilderness area near St. Gallen, Switzerland. Photo by M. Diemer.

protection for existing (e.g., Sihlwald) and proposed urban wilderness areas, such as the watershed Goldach-Tobel close to St. Gallen (see Table 2).

Independent of these Swiss federal activities, a growing interest prevails throughout central Europe for establishing further urban wildernesses, evidenced by activities of local initiatives, conferences, and workshops (Held and Sinner 2002). Campaigns by Swiss and German NGOs have resulted in broad, nationwide coverage and hence greater public and political awareness of urban wilderness. Presumably several new urban wilderness areas will be established or officially recognized

throughout Germany and Switzerland as a result of this publicity.

Another wilderness category unique to central Europe, often located in metropolitan areas, should also be mentioned here (see Table 1). Several former industrial areas in Germany have recently gained protective status, such as in the Ruhrgebiet (Emscher Landschaftspark), Berlin (Schöneberger Südgelände), and Dessau (Ferropolis). The areas usually comprise extensive industrial complexes, including vast areas used for the storage of materials, such as open pits or quarries, and mounds of spoils that were abandoned for economic reasons. These sites are

unique in that they attempt to coalesce a number of potentially conflicting uses, such as demonstrations of historical industrial architecture, ecological succession on spoils, various recreational activities, and cultural events. They all include zones set aside for rewilding (i.e., secondary succession). As a result of these multiple uses, we classify these sites as urban rewilding areas rather than urban wilderness (see Table 1). The distinction between wilderness and rewilding area seems contradictory, that the process of rewilding occurs in both categories. Yet, the long-term objectives are different. Wilderness areas are tracts of land specifically set aside to evolve without human interference, whereas rewilding areas, or fractions thereof, may never attain this state, due to the multiple management objectives.

Public Acceptance of Urban Wilderness—Successes, Functions, and Potentials

The concept of wilderness is highly popular throughout central Europe and publicized through tourism, the media, and NGO campaigns. Nevertheless, many people still associate it with vast national parks located in Scandinavia, North America, or elsewhere. Only several of the national parks in Germany, such as Bayerischer Wald, actively promote the term *wilderness*. Furthermore, due to restrictions on use, many of the wilderness areas within national parks are not freely accessible to the European public.

Hence, urban wilderness areas can serve to promote the wilderness concept in situ in the proximity of urban centers, as well as to foster nature appreciation, recreation, and experiences of solitude (Zucchi 2002). Additional uses include educational, pedagogic, or therapeutic programs.

In fact, the success of two integrated educational and therapy programs in Switzerland appears to be closely linked with recurrent nature experiences in urban wilderness areas.

However, these human demands must be weighed against ecological objectives (biodiversity, maintenance of natural processes) as well as legal constraints (maintenance of roads, public safety issues, hunting, access). Irrespective of these limitations, urban wilderness areas have a great potential for education, recreation, and the experience of nature (Meyer et al. 2002). In addition, their establishment addresses the criticisms of Cronon (1995) and others, who have argued that the preoccupation with remote and presumably pristine wilderness has been counterproductive with respect to environmental awareness and appreciation of nature (but see above quote from Leopold). In this context, urban wilderness should and can contribute significantly to environmental awareness in urban areas, where the majority of people reside and where environmental problems are most severe. In addition, urban wilderness areas serve as vital resource for future generations. For children and adolescents, these areas provide a suite of functions, including playgrounds, refuges, and testing grounds for personal challenges under natural conditions.

The creation of wilderness or rewilding areas proximate to urban centers will contribute to conservation, nature appreciation, and the overall quality of life. In doing so, they complement the more remote wilderness areas, such as national parks and reserves throughout central Europe and elsewhere. Urban wilderness can be viewed as a unique European approach to reinstate wilderness via rewilding in a landscape extensively shaped by humans and as a model for other metropolitan areas worldwide. 

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Figure 3—View from Sihlwald towards Zürich, Switzerland. Photo by A. König, Grünstadt Zürich.