

notes from abroad

PARK MANAGEMENT in Germany

A YOUNG AND GROWING PARK SYSTEM
DRAWS INSPIRATION FROM THE
U.S. NATIONAL PARK MODEL

Article and photos by Thomas Meyer

Located in central Europe, Germany is about the size of Montana and has a long history of settlement and a high population density¹. Thus, Germany's landscape is very fragmented and lacks uninhabited natural areas such as old-growth forests. In this setting, Germany has only been able to establish national parks on lands altered by human use; areas suitable for the highest preservation status have been hard to find. Nevertheless 14 national parks exist in my country today (figure 1). They are situated in less populated regions and are generally small compared to parks in North America. However, their objective is similar to U.S. national parks: to allow natural succession, protect natural landscapes, and provide for recreation.

Because of our land use history, the present focus in German parks is on protecting succession so that natural landscapes can develop once again. Our parks are in transition because the primary resource for which they were created is not (entirely) present. Almost 70 years ago Shenandoah National Park (Virginia) became the first "transition park" because its mixed hardwood and evergreen forest had been logged from previous settlement, leaving only small patches of old-growth forest (Engle 1998; Conservation Foundation 1985). As one can imagine, land uses such as agriculture and forestry leave footprints on sometimes fragile ecosystems. Yet, as we all know, resource management is a tool used by park administrations around the world to restore degraded ecosystems. In this respect national parks in Germany and the United States are

similar, and, as you will see, an intriguing blend of both similarities and differences in the history and management of the two park systems exists.

NATIONAL PARK BY "ACCIDENT"

Germany's first national park was established in the Bavarian Forest in 1970 with the objective of attracting tourists to its remote location. However, the denomination "national park" was merely a public relations strategy to promote a park that was intended purely as a recreational area. Consumptive uses such as timber harvest and hunting were to continue. Thanks only to a few people who were in charge of managing those 13,000 hectares (32,123 acres) was the Bavarian National Park transformed into a "real" national park according to international standards.

The long absence of national parks in Germany can be explained by a different conservation tradition from the United States. Early conservation efforts in Germany focused on species conservation and preservation of natural monuments, leading to the creation of the first nature reserves around 1900. Although some politicians were inspired by the national park idea, their plans failed, in part, because Germany lacked pristine areas and the concept of transition parks had not been established. Additionally, two world wars intervened and diverted attention from the conservation movement.

A second national park was established in the Alps in 1978, followed by three more parks in the Waddensea coastal zone of the North Sea. Thereafter, the potential for additional parks was scant until 1989 when the German Democratic Republic (GDR or East Germany) became more open to the West. With the fall of the Berlin Wall a group of East German conservation leaders went on a study tour of the United States to learn about protected areas and to incorporate new ideas in their latest conservation projects. The former East Germany was less densely settled than its western counterpart and possessed many promising conservation sites. Although several areas suitable for national park designation had been identified in the years of the GDR, their protection as "national parks" was prohibited because the idea was American or capitalist! The conservationists met with NPS officials and visited Shenandoah National Park where they were fascinated to view the results of America's first transition park project. By the time of Germany's reunification in 1990 five parks in the former GDR had been created, setting aside an additional 130,000 hectares (321,230 acres—figure 2, page 14). About 5% of the former East Germany was protected as nature reserve, biosphere reserve, or national park—a great success for nature conservation!

¹ Two-hundred thirty people per square kilometer or 89 people per square mile compared with 28 per square kilometer or 11 per square mile in the United States.



Figure 1. German national parks by state. (Adapted by the NPS Natural Resource Information Division from the original by LANIS-Bund—the German Federal Agency for Nature Conservation, 1999.)

MANAGEMENT GUIDELINES NEEDED

In 1973 the International Union for Conservation of Nature and Natural Resources (IUCN) set up criteria for classification of protected areas. The long experience of U.S. parks heavily influenced those standards for national parks around the world. In fact, German park managers aim to meet the IUCN standards since they promote the national park idea better than German law. The IUCN revised its standards in 1992, requiring national parks to fulfill management criteria, such as preservation of ecological integrity and exclusion of any use that might deteriorate it, in at least 75% of an area. This explicit requirement was necessary because forestry, mass tourism, and mining

are incompatible with national parks. Nevertheless, natural resource restoration operates with tools commonly associated with forestry, including thinning and replanting. Accordingly, park zoning must distinguish restoration zones from natural areas. Currently only three out of 14 German parks qualify as national parks by IUCN definition.

NATURAL LANDSCAPES—STEP BY STEP

By far the largest challenge for managers of recently created German parks is addressing the many concerns related to restoring ecological function in cultivated areas. Centuries of forestry, mining, and hunting have left behind a landscape with logging roads, planted forests, introduced species, and unnaturally high deer populations. Restoration work is needed to remove structures like roads, buildings, and bridges and to de-channelize streams. Field trials in the Bavarian Forest have shown that leaving roads intact does not mitigate the human impact. In this case the wilderness ethic nurtured in the United States influenced park managers to undo human impacts where feasible in order to have “wild” landscapes inside park boundaries. The retention of wild landscapes in Germany is a philosophy that parallels, for example, the watershed rehabilitation program in Redwood National Park (California), although removal of logging roads there is

mainly to mitigate erosion.

In German national parks meadows and former fields can usually be left completely to natural succession. Only when cultural landforms are crucial to the survival of threatened species are they perpetuated by active management. This policy is comparable to the management of historic landscapes and cultural zones in U.S. parks, even if we do it for different reasons. Due to the small size of German national parks, we try to keep as little area as possible under permanent vegetation management, preferably less than 5%. In contrast, nature reserves, which are smaller in size and permit more active management, are usually better suited for this goal. Furthermore, historic landscapes receive a different protection status



that allows active management to preserve the historic context.

Managers of our young parks generally have two options regarding any resource problem: do something about it or let nature regulate it. The decision to act or not applies to animal populations, plantation forests, roads, and exotic species alike and depends on the philosophy of the park manager, funding, and the feasibility of the proposed remedy. Each park might take a different approach. Surely surprising to the American reader is that national parks in Germany are not within federal, but rather state, authority. Also, states have not officially agreed upon a park management policy. Nevertheless, most park managers are eager to comply with the already mentioned international standards and are advocating wilderness ideas similar to those in the United States. Thus, we are developing an informal management policy that is adapted to our situation in Germany but according to the spirit of John Muir and Aldo Leopold.

UNIQUE PROBLEMS?

In three German parks, where spruce plantations partially cover the park, managers worry about bark beetle infestations and lacking recruitment of native tree species. Trees killed by insects are a normal occurrence in a forest ecosystem and, in general, park managers agree that national parks should protect such processes. Unfortunately, all parks have close neighbors, and since Germany is densely populated, they observe cautiously what happens inside the park boundaries. Private forest owners bordering parks oppose such “large-scale experiments” as they refer to natural processes (figure 3). Local acceptance of parks is crucial and requires managers to respect the fears of park neighbors that insect infestations might spread. In the Bavarian Forest, a buffer zone of at least 500 meters (547 yards) width serves as a barrier where infested trees are removed or stripped of their bark.

Another issue related to plantations is the uniformity of forest stands—often including nonnative tree species (figure 4). How does one deal with this problem? Leaving such stands alone might lead to a natural forest with natural species in a couple hundred years.



Figure 2. (above) The white cliffs of Jasmund National Park attract more than 1.5 million visitors per year.

Figure 3. (right) The natural zone of Hochharz National Park encompasses trees that were killed by a bark beetle infestation (lps typographus) 20 years ago following wind-throw.



On the other hand, thinning helps speed up that process by breaking up structures and giving seeds of other species a chance to invade the gaps. This technique adds diversity to almost bare forests. Clear-cuts could also (very fast indeed) help to jump-start a new, natural forest. Except for small acreages, however, this option is not applicable in most parks. Only a decade ago, clear-cuts were banned in Germany by law and today forestry is concentrating on selective harvesting. Reinventing clear-cuts for conservation purposes would surely be a very unfortunate decision.

Wildlife needs regulation in all of Germany because predators like wolves, bears, and bobcats were eradicated centuries ago and are missing in our ecosystems. Without hunting, deer and elk populations would otherwise increase dramatically and have a great impact on vegetation and natural regeneration of our forests. Although hunting for trophies is fairly common in Germany, it is prohibited inside parks. In protected areas elk and deer are regulated by imitating predation, with rangers culling preferably young, weak, and ill animals. Trophies of these “regulated” animals become property of the park.

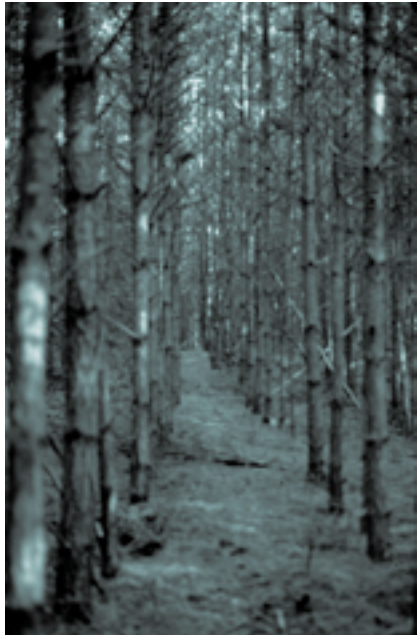


Figure 4. (left) Müritz National Park, created in 1990, inherited several thousand hectares of pine plantations. Thinning is an option to break up these uniform, unnatural forests.

Figure 5. (below) Former tank shooting range—today the largest forest succession in Hainich National Park.



The situation in Germany's Hainich National Park is somewhat similar to Shenandoah, where farmlands from pre-park days were left alone and a new forest grew up in its place. In Hainich, large areas were cleared in the 1980s to create a Russian-tank shooting range. Today it is the largest forest succession in Germany and has been protected in a national park since 1997 when the military abandoned the area (figure 5). Because only native species revegetate these lands, no further management is needed.

PARKS AND PEOPLE

Experience has shown that protected areas in Germany only have a chance to function if created on state property. This is especially true for national parks because they usually exclude or end any detrimental uses that were previously legal. In Germany private landowners living adjacent to parks mostly oppose the parks because they fear restrictions, park expansion, and insect diseases that might escape from within the boundary. Even though visitor spending has a high positive impact on local economies and many jobs can

be attributed to the parks, this negative attitude prevails. Studies have shown that the greater the distance between a park and its neighbors, the greater its acceptance. Therefore, the main goal of park interpreters is to address these problems and to educate not only visitors from far away but also park neighbors.

CONCLUSION

Although the many park management problems described in this article are mostly related to Germany's fragmented and "civilized" landscape, managers in some U.S. national parks are probably dealing with similar issues. Considering that untouched landscapes are decreasing year by year, the ability to find ways to deal with human influence in protected areas will become increasingly important. Perhaps this overview of current park management in Germany will encourage further thinking about resource management in disturbed landscapes and arouse interest in visiting our parks to see what results the "best idea America ever had" has produced abroad. 

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