

In the FATHERLAND of Forestry

The goals and dreams of the Baron of Castle Canstein reflect lessons learned over centuries of forest use and abuse. By CHRIS BOLGIANO

With a huge key, the Baron unlocked the heavy wooden door. The room in the tower was cool, dry, and dim, just as an archives should be. The thick stone walls had been built in the 17th century for that very purpose, and now hold metal shelves lined with acid free storage boxes. In them are parchments in crumbed 13th-century script documenting the construction of Castle Canstein, a meld of Celt and Saxon in central Germany. Also on the shelves are venerable leather-bound books and thick old newsprint, evoking earlier ages. Finally, the room contains an 1844 inventory of the estate's forests, now owned by Baron Alexander von Elverfeldt.

"Those same sites today produce 10 times more wood than they did in 1844," says the Baron, stooping to reach for something on a shelf. At 62, the Baron is slim and light on his feet, and it's easy to imagine courtly ancestors. He grins more readily than the average German, a trait he traces to the open, easy ways he learned during a year spent wandering through America in the 1950s. A brief stint working for the U.S. Forest Service

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in Oregon was one of many experiences that shaped Herr Baron's global perspective on forestry and propel his current involvement in international forestry.

His perspective is global, but his views are rooted in Germany, where the science of forestry was born. From 1983 to 1989, von Elverfeldt was president of the German Forestry Council, an umbrella organization of forestry groups. Recently he retired after nearly two decades as president of the private forest owner's organization in his state of North Rhine-Westphalia.

The 1,440 gently rolling acres of woods around Castle Canstein exemplify many of the lessons learned from centuries of forest use and abuse in central Europe. Outside the tower, below stone ramparts still massive if disheveled with age, the smell of wild roses overpowers the past and makes the present immediate and sensuous. Beyond the waft of fragrance, past the tiny town of Canstein at the foot of the castle heights, the landscape rises and falls as if breathing.

"These lands were merely heath two centuries ago," the Baron says. "The legendary feeling that Germans have for the woods stems largely from the efforts to regrow their forests."

Today forests cover nearly a third of Germany. Almost half (46 percent) are owned by private individuals, the rest by states and municipalities, which seem to

rank clean water and recreation as being as important as logs. Unlike the United States, the German federal government owns virtually no forestland; neither do timber companies.

The picture-postcard village of Canstein and a green rhythm of fields and forests reward visitors to Castle Canstein, where a tower (inset) houses archives and an inventory of the estate's forests.

Among private owners like the Baron, whose family bought Canstein in 1853, a continuity of ownership as yet unimaginable in America plus inheritance laws biased against division of land are an unchanging bedrock on which forest management is grounded.

Driving across his lands on narrow roads devoid of other traffic, von Elverfeldt slows to point out the tangible marks of time: here a prehistoric burial mound, there the remnants of agricultural terraces abandoned during the Thirty Years' War (1618-1648). Both spots are surrounded by big trees, but differences in undergrowth and soil level are quite apparent. Prior land use with the attendant impacts on the soil are weighty factors in forest planning on the Baron's land. "I use the old inventories to find out what was planted where, and how well or poorly it did," Herr Baron says.

The past dissolves in the dappled sunlight of the here and now and a breeze that rustles through a grove of oaks and beeches. Here is today's version of the quintessential European forest: the ground strewn with ferns, the trunks thick, the canopy tossing and gleaming high overhead. Half of the Baron's woodlands are hardwoods, mostly beech and oak; the other half is composed of spruce, pine, and larch, with a small plantation of Douglas-fir. He generally manages for at least two tree species per stand, and the mix is important. "We leave young beech in the shadow of oaks to keep branches from growing," he says, "and we're letting beech grow among the shallow-rooted spruce to give them more stability against wind throw."

Natural regeneration is relied upon in many of the stands, sometimes with a little help. Beneath our feet, last winter's



decaying leaves are churned by the unmistakable rooting of wild pigs. The Baron smiles. "They don't eat all the acorns, and they leave some turned under and well planted," he says. "In fact, a machine we use to plant acorns mimics the actions of pigs."

Roe deer are more of a problem. Walking back to the car we climb over the kind of temporary fence, ubiquitous throughout German woodlands, that protects young trees from being nibbled to death.

Stacks of logs are piled neatly along the road, but there are few obvious signs of logging in the woods themselves. Clearcutting is generally scorned in Germany and prohibited in some parts of the country. Various methods of selective harvesting are preferred.

"We've had good experience with the wedge shelterwood technique—opening a slice of light through the canopy to regenerate beech, then moving this slice through the stand over time," von Elverfeldt says.

Rotations are often well over 100 years. "Our oldest trees are 300-year-old oaks," the Baron says. "I have no plans to har-



Nestled in the rolling hills of central Germany, Castle Canstein (above) dates to the 17th century. Baron Alexander von Elverfeldt examines a 13th-century document in the castle's tower room.

vest them, not from nostalgia, but because they are like a savings account. When hard times come, if prices are good, one tree could bring close to \$2,000."

This has been a landscape of hard times, and the future is ambiguous. One of von Elverfeldt's primary goals is to

ensure that his forests continue producing wood and ecological services far beyond his own lifetime, but he worries that the buildup of heavy metals in the soil is a poisonous time bomb.

His beeches show symptoms of *forest decline*, in which leaves turn yellow from loss of nutrients. This is different from the out-

right forest death or *Waldsterben* from sulfur dioxide that has claimed thousands of acres along Germany's border with Poland and the Czech and Slovak Federal Republic (Czechoslovakia). Forest decline is a widespread malady attributed to complex interactions among air pollutants, soil, insects, diseases, and climate. Damaged trees don't necessarily die—West Germany estimates its dead and dying stands at only .5 percent of the total forest—and new data seems to show waves of increasing and decreasing severity.

An inarguably concrete form of catastrophe was visible in the Baron's lumberyard, where a massive stack of logs was being sprinkled to keep off beetles. A ferocious windstorm the previous year had downed the trees.

RESTORING THE UNRULY TO THE GERMAN LANDSCAPE

◆ Riding trains across Germany and back again affords a long look at the landscape, from expansive views of flat coastal plains and rolling uplands to intimate glimpses into backyards. Gardens lap up to the tracks in neat, flower bedecked plots; small fields stripe the valleys with bright green corn, yellow rye, purple flowers; forests darken the slopes and serrate the ridges.

It is a profoundly pastoral landscape whose entwining of the natural and the human is best described as a *Kulturlandschaft*, German for cultural landscape. Fields end precisely, cleanly. Forest horizons change texture and color in evidence of a harvest. For an American environmentalist in the 1990s, there is a sense of unfulfilled expectation. The eye longs for something ragged at the edges, something unkempt and unruly; something of nature that has overthrown the yoke.

Incredible as it may seem in this tamest of

countries, such places have begun to re-evolve in the half century and more since the lack of wilderness in the German landscape made Aldo Leopold so uneasy. In 1970, Germany inaugurated a system of national parks, modeled on America's, where land is left unmanaged. In the Bavarian Forest National Park, where contrary to centuries of German custom deer are neither fed nor

hunted, I saw the lush undergrowth that Leopold despaired of finding in overbrowsed,

Central Germany is a pastoral landscape where fields end in tidy precision.



managed woods. Some German states have withdrawn small plots of public land from management so natural processes can be studied. I toured one such reserve with a forester who promised a liter of beer to any logger who saved a woodpecker tree.

The stream canalization that so depressed Leopold is being rethought. Along the Altmuehlal River, Bavaria is digging out culverts and recreating fish habitat.

Plantation habits persist in some places. The Black Forest, especially, is a monotonous place, and not so much brooding as boring. But in other places there are tousled forests of many native species, and on the eastern side of the Elbe River there are wooded wetlands where European cranes still breed.

It has been said that tolerance of predators is the measure of a people's relationship with the wild. The wholesale extirpation of predators, accomplished in Germany as early as the 1700s, is now being partly reversed by lynx reintroductions. Lynx are also thought to be moving on their own into Germany

"Selling such a huge amount of wood over a short time won't hurt," von Elverfeldt says, "because Germany has the best tax system for forestry in the world. Forest owners are not legally required to make an inventory every 10 years to regulate their harvests, but if they don't, they lose all tax advantages."

Taxes and other legal matters take an afternoon of the Baron's time as he, just as his own father did at the same age, turns the estate over to his son. Alone in the castle, I hold my breath. Surely 800 years of living will echo through these rooms if only I can quiet myself enough to hear. Didn't Reginboldus yell to his retainers? Didn't the Rave of Pappenheim's wife cry out in childbirth? And indeed I do hear the wail of a child, not some wraith from the past, but the Baron's grandchild, who lives in a nearby wing.

The core of the castle—from the tiled entrance hall with displays of armor to the 19 bedrooms with their canopied beds—is now run as a hotel for groups of eight or more. (The Baron and his wife, Juliane, who is the chef, especially like to host forestry groups.) Observing the guests are oil portraits of von Elverfeldt ancestors, dark of palette and mien. The furniture is of traditional dark German wood, carved into griffins, nymphs, and trolls. Beyond white frame windows beckons a landscape much changed by humans, but still green and rich. AF

across the dismembered borders to the east, and golden eagles from the Alps may be recolonizing the Black Forest. The giant owl called Uhu, whose voice Leopold mourned, is still rare but seems considerably more widespread than in the 1930s. I lost count of the hawks hunting in fields that I passed through by train, and in many places where I walked I stepped over martin scats. There is a consciousness of the need for connections among islands of habitat, and a hope that the new political openness will broaden the options.

Leopold found Germans flocking to wild west movies and so did I: everyone was talking about Dances with Wolves. An inherent fascination with untrammled nature has begun to express itself tangibly in Germany. There has been an awakening to the value of nature left to its own wild choices. If it can happen in Germany, one of the most densely populated nations on earth in one of the oldest habitats of modern man, there may yet be hope for wilderness in the world.—CHRIS BOLGIANO

THE FORESTS OF CENTRAL EUROPE NEW PERSPECTIVES

By RICHARD PLOCHMANN

Europe is considered the fountainhead of the scientific principles on which American forest management was developed. There, as well as in this country, foresters today are changing their viewpoints on how best to sustain healthy, diverse forest ecosystems. The evolution of philosophies regarding forests that have been managed for centuries should hold a lesson or two for American foresters, who now find themselves buffeted by unprecedented change.

This article was adapted by Al Sample, director of AFA's Forest Policy Center, from a lecture the late Dr. Plochmann gave while professor of forest history at the University of Munich.

If its evolution had been left to nature, central Europe today would be a wooded land with over 90 percent of its area under forest cover, consisting of temperate hardwood forests, mainly beech and oak; mixed hardwood/Scotch pine forests; and mountainous coniferous forests composed primarily of Norway spruce and European fir. Hardwoods clearly dominated central European forests, with an estimated proportion of 80 to 85 percent.

Since the beginning of agriculture in central Europe 7,000 to 8,000 years ago, about two-thirds of the forest area has been cleared for other types of land use. In