Volume 9. Two Germanies, 1961-1989
The Media Warns of “Forest Dieback and Acid Rain” (1983)

Long ignored by growth-oriented politicians, acid rain-induced forest dieback became a central issue in the 1983 federal election campaign. Leading news organs joined the chorus of warnings against the impending ecological disaster, which threatened to put an end to recreational hiking and the romantic experience of nature.

“We Are on the Verge of an Ecological Hiroshima”

[. . .]

Environmentalists, who have warned of forest death since the mid-1960s and who have always been dismissed as fantasists, are currently in a state of astonishment.

Württemberg environmental protection official German J. Krieglsteiner is amazed that suddenly, “politicians of all stripes are using our phrasing, often verbatim.” Krieglsteiner has a bad premonition: “Hopefully,” he wrote to CDU general secretary Heiner Geißler, “this isn’t just campaign propaganda that will be forgotten [after the election] on March 7.” But the silent death of forests can no longer be repressed by the public consciousness. The question is whether it is “five minutes to midnight” for German forests, as Munich SPD representative Hans Kolo thinks, or “already five minutes after,” as Joachim Pampe, CEO of the Federation of German Forest Owner Associations (AGDW), thinks is possible.

Pampe believes that there has already been “irreparable damage to the forests” in the Federal Republic. “The degree and extent of the damage,” reports BUND (German Federation for the Environment and Nature Conservation), “are increasing to a gallop.” The land area given over to diseased forests “has doubled throughout Germany in less than a year,” putting at risk the survival of hundreds of animal and plant species that depend upon the living space that is the forest. “For this degree of death, the term ‘ecological Holocaust’ is not too strong.”

The forest has not only been dying in the so-called congested areas of the lower mountain ranges, where particularly massive amounts of air pollution get mixed up with rain, snow, and fog. On the flatlands as well, as in the Saxon Forest near Hamburg, the viability of spruce trees has recently declined “in an unsettling way,” according to Professor Eberhard Brünig, director of

the Bergedorf Institute for World Forestry. Hamburg's Young Union [CDU youth organization] is troubled by the vision of "dead trees in the Saxon Forest in ten years."

When the Bonn Ministry of Agriculture ordered the first nationwide eco-inventory last summer, the forest service offices registered that 562,000 hectares [2,200 sq. miles] were already damaged – that is double the land area of Saarland and accounts for 7.7 percent of the one-third of the Federal Republic that is forested. In the meantime, however, this figure has been far surpassed by reality. According to the estimates by the Federal Association of Citizens' Initiatives on Environmental Protection (BBU), about 30 percent of forested areas have already been affected.

That may well be. For one thing, Diethard Altrogge of the Higher Forest Authority in Münster said that the figures were "thrown together under time pressure" and that, additionally, the data was gathered by staff members who were not adequately trained to recognize "creeping early damage" (the Hessian state government). According to the records of the Ertl ministry[1], the damage at the time was already being estimated internally as "probably far greater." Also, given the speed at which the damage is spreading, Bonn's official figures represent merely "the tip of the iceberg" (Altrogge).

[. . .]

Whereas fir tree death is limited to Bavaria and Baden-Württemberg, since this species rarely grows in other federal states, spruce trees and even beech (which are considered very robust), and oak trees, too, are ailing in both northern and southern Germany. In many places, maple, mountain ash, and linden trees, as well as blueberry, raspberry, and blackberry bushes are dying.

The catastrophe can no longer be played down. According to a recently published critical assessment, after "prolonged attempts at denial, appeasement, and downplaying," politicians responded as they always do in such cases:

Phase 1: The problem is treated as though it did not exist.
Phase 2: The problem is downplayed along the lines of: "It isn't really that bad."
Phase 3: Politicians justify their own actions by noting that others reacted the same way.
Phase 4: Additional scapegoats are presented to the country; with respect to dying forests, nuclear energy opponents are held to be partly or mostly responsible.
Phase 5: The subject is – in the language of verbal imperialism – "appropriated." Explanations follow, claiming that the issue was always given high priority. Measures are taken that fall far short of what is necessary and possible.

[1] Josef Ertl was the German Federal Minister for Food, Agriculture, and Forestry from 1969-82 and 1982-83 – trans.

Those responsible for environmental affairs have meanwhile moved from Phase 2 to Phase 3, 4, or 5, depending on the federal state.

Bavaria's minister of agriculture Hans Eisenmann, who, in 1981, had accused critical forestry experts of sowing panic in order to receive state funding for research projects, explained at a hearing last week that spruce trees in Bavaria have been damaged "to a heretofore unfathomable extent." Eisenmann: "Symptoms have spread throughout most of the state…."

[. . .]

BUND also warns that if developments are not stopped, then all of Germany will be facing "deforestation and thus desertification and karstification." For Germans who strolled in supposedly healthy forests last summer, this is certainly difficult to imagine.

In rural areas, journalists sometimes still dismiss "the horror scenario of the terrifying acid steppe" as "sheer nonsense" (*Jesteburg-Hanstedter Zeitung* in Lower Saxony). The early stages of forest dieback cannot be perceived by laypeople, and the catastrophe does not become a political issue until, after a years-long incubation period, the damage is irreparable. This adds to the treachery and tragedy of a new form of environmental threat.

"In the 1960s," says Social Democrat [Freimut] Duve, "we were concerned with environmental *pollution*, such as the garbage in the forests that you could see and deal with." But now politicians are increasingly confronted with cases of hidden environmental *contamination*, and it is overwhelming them.

The toxins affecting forests throughout central Europe are invisible; in many places, they have caused the level of acidity in rain to increase a hundredfold within twenty years. Toxins released from the burning of fossil fuels in power plants and cars can even contaminate areas far from industry, especially when super-high chimneys transport them into zones of constant wind.

Presently, there are 186 substances that are suspected of causing forest dieback, including fluoride, nitrogen oxide, heavy metals, hydrochloric acid, and especially sulfur dioxide (SO_2). Every year, 3.5 million tons of SO_2 (the main toxin in quantitative terms) rises from West German chimneys; this is enough to fill 130,000 freight cars and translates into nearly 50 kilograms per resident. The highest SO_2 concentrations are measured northeast of industrial centers, corresponding to the main direction of the wind.

The first phase of damage that toxic rain – sometimes as acidic as vinegar – causes to roots and foliage can only be seen under a microscope. Metals such as aluminum that are released into the acidified forest floor drive out necessary bacteria and damage the fine root system that supports and nourishes the tree. At the same time, (dry or wet) acid rain attacks trees' leaves or needles and disrupts the process of photosynthesis, whereby plants convert light, water, and carbon dioxide into sugar and oxygen.

People taking strolls usually cannot deduce that the acidic ground is responsible when beech seeds fail to germinate or when trees gradually rot from the inside, age faster, or lack resistance to pests, storms, frost, or drought. Urbanites living far away from nature can hardly distinguish a fir tree from a spruce, let alone perceive that inconspicuous, highly sensitive lichens are disappearing from trees, that bark is detaching from trunks, needles are yellowing, and crowns gradually thinning.

[. . .]

What is perceptible even to laypeople, however, is the final phase of forest dieback, when the tree stock is totally destroyed by a combination of air pollution, poor ground quality, weather conditions, and pest infestation that varies from tree species to tree species, from individual tree to tree, from place to place, and from year to year.

This is the situation in the Czech Erzgebirge, in the area around the brown coal power plants and hydrogenation facilities: dried up, gray wooden skeletons that are hardly recognizable as former spruce trees stand on tens of thousands of hectares, only an hour's drive from the Bavarian border. At the top of the Erzgebirge, once one of the most lushly forested landscapes in the heart of Europe, the vegetation, after ailing for a decade and a half, all but toppled – apparently irreversibly – within no time. In the contaminated mountains, where hardly a bird sings, no tourists stroll, and the spring water is unfit for drinking, reforested areas die after a short time and only rarely do potatoes, rye, or vegetables survive on fields and in gardens.

BUND, which organized an observation tour through the extensive environmental ruins in the Erzgebirge, warns that "over the next few years, a similar fate threatens the higher altitudes of the Bavarian Forest, the Upper Palatinate Forest, the Fichtelgebirge, the Black Forest, and the Harz mountains, as well as the irreplaceable forests of the flatlands." As early "as the year 2000," says Gerd Billen of the BBU, there "might be steppes covering vast areas" of West Germany.

[. . .]

Source: "Wir stehen vor einem ökologischen Hiroschima" ["We Are on the Verge of an Ecological Hiroshima"], *Der Spiegel*, February 14, 1983, pp. 76-84.

Translation: Allison Brown