Pollution Threatening Swiss and German Forests

The battle to save Switzerland’s forests from the effects of air pollution is now officially engaged. On one side is an influential automobile lobby opposed to lower speed-limits as a means of saving trees. On the other side are environment-conscious politicians and an array of conservationist interest-groups. And this is no local issue: neighbouring West Germany is already on the horns of much the same dilemma, and Switzerland’s case could soon be repeated practically throughout Europe.

The crisis may have come to a head sooner in Switzerland because forest loss is a matter of life and death in some parts of such a mountainous country. Ironically, no nation has done more than Switzerland to make forest conservation a way of life, particularly in the interests of landslide and avalanche control. More than 100 years ago, Switzerland passed a tough, comprehensive law to make sure that its forests would be preserved into posterity. The 1876 measure of some Cantons, designed to halt overexploitation of forests, was extended nationwide in 1902. It required that all tree-cutting be followed by generous replanting. But now the nation is in the grips of a Man-made crisis that is threatening to undo over a century of disciplined good work.

Most existing studies of ‘acid rain’ pollution have blamed fallout from power-stations and factories as the main culprit. The Swiss national network of air-pollution monitoring stations (NABEL), however, published a bombshell report in 1983 which showed that Switzerland’s share of the problem could not be blamed wholly on heavy industry at home or in neighbouring countries.

NABEL had figures to show that oxides of nitrogen, 80% of them produced by motor-vehicle exhausts, were building up in the environment at a rate exceeding 10% a year. NABEL also said that oxides of sulphur from other—mainly industrial—sources inside and outside Switzerland were building up at a similar rate. Both categories of oxides are known triggers of the ‘acid rain’ phenomenon, though the relative importance of the two varies considerably from country to country or from region to region.

Reinforcing the NABEL report, field studies produced a mass of evidence to show that, across the whole Swiss landscape of alps and river valleys, an average of one in three trees is ‘doomed or dead’. In some areas, such as the heavily-populated northern region around Switzerland’s largest city, Zurich, and in the southern alpine Cantons of the Grisons and Valais, the toll is nearer one in two.

Under terms of the memorandum, Canada will contribute US $2.5 millions annually to the project. This entitles Canadian research workers to have two scientific representatives on each cruise, and one co-chief scientist a year. Canadians will also take part in ODP planning, including the selection of drill-sites. In September and October of 1985, JOIDES Resolution will drill in the Labrador Sea and Baffin Bay. Co-chief scientists from the Bedford Institute, Dartmouth, Nova Scotia, and the University of Rhode Island, will lead the expedition.

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