

The Western Front had an enormous impact on France's forests during the war because much of it was located within its borders, and because the Allies drew heavily upon French forests for their wood supply. But the war's impact lingered in the years following, too.

THE IMPACT OF WORLD WAR I

ON FRENCH TIMBER RESOURCES

What the strategists of World War I had foreseen as a short war of movement bogged down on the Western Front into a war of attrition. By the end of the first year, the trenches of both sides formed a grinding machine with a maw 350 miles wide, which devoured, in addition to

millions of men, trainload upon trainload of wood needed to build defenses, to shelter and warm troops, and to repair transportation systems. Until the last months of the war, the Western Front lurched back and forth in a narrow zone, most of which lay in northern France. This ensured that France, of all the combatants, would pay the heaviest price in forest resources. The needs of her war industries and of new military construction at a distance from the battlefield compounded the crisis.

In 1920 France's national forest service (l'Administration Générale des Eaux et Forêts) issued a report dealing with the impact of the recent war upon public and private forests. Although statistical in nature, the report pointed out that many significant aspects of wartime cutting operations needed extensive explanation and that some defied quantification.

In the combat zone and in those territories that had fallen under German military occupation, the waste of war was most pronounced. According to official French sources, 350,000 hectares of forests had been either totally destroyed or their growing stock so depleted that no sawtimber could be expected for sixty years. In the first postwar years the annual loss of production from the combat zone and occupied territory would be 400,000 cubic meters

of sawtimber and 600,000 meters of firewood, the total representing 3.95 percent of the entire prewar production of France.

The official statistics for the actual battle areas should be accepted with some caution. In these zones rouges devastation was real, but reports of it tended to be exaggerated for the benefit of French legislators disposed to vote extra credits for reforestation in those areas. Such expenditures, they incorrectly assumed, would eventually be covered by German reparations. Some of the money officially earmarked for the zones rouges was actually diverted to forest investment on public lands elsewhere.

Some 90 percent of French forest land remained behind the Allied lines and outside the battle zone. Here the uneven geographical distribution of cutting and the hurried logging procedures were of greater significance than the actual volume of wood that passed through the sawmills or went to the front as roundwood. About one-third of those forests were managed by l'Administration Générale des Eaux et Forêts, and, for them, reliable statistics are available. The 36.2 million cubic meters of wood actually cut on Administration lands from 1914 through 1918 was only about 2.5 million cubic meters more than would have been harvested under normal, peacetime conditions. At the

BY JOHN R. JEANNENEY

end of the war, cutting on those lands as a whole anticipated the sustained-yield rate by less than a year.

The main explanation for this seemingly moderate depletion was that relatively little cutting took place outside the combat zone during the first two years of the war. The necessary manpower was unavailable, and France subsisted on imports and upon her existing stockpile of forest products. Cutting did increase to almost normal levels in 1916 and became very heavy in the last two years of the war, especially when the Allied forestry units went to work. Extensive as cutting was in 1917 and 1918, the impact was softened by the fact that it drew upon reserves that had accumulated over the three previous years.

In 1917 and 1918 the real bottleneck hindering wood supply was not production but rail transportation. Naturally, emergency cutting, ahead of the normal rotation, occurred most often in the *conservations* (management regions) closer to the front. This was to disrupt local forest economies in postwar years.

Much less is known about the fate of forests in private hands. Obviously, the generally high level of timber prices, even though controlled after September 1916, was a strong inducement to sell. Allied forestry units worked in timber on public as well as private lands, but their activities were only part of the total picture. It does appear that growing-stock depletion in private forests was more serious than in the public sector. The 1921 report of l'Administration Générale des Eaux de Forêts did offer a prediction of how much total production from all French forests, public and private, would be reduced as a consequence of the war. Hardwood production was expected to decline by only 270,000 cubic meters, although the higher grades of walnut used in rifle stocks and airplane propellers would be in short supply. Poplar, which was grown in plantations or along highways, was placed by the French in a special category. Because of the ease of exploitation, almost all poplars of usable size had been cut during the war, ensuring that the volume harvested in postwar years would initially drop by 90 percent but would return nearly to normal after five years.

Postwar shortages were expected to be most serious in the softwoods, especially spruce and fir. Because of France's soils, climates, and management policies, those were the species in shortest supply even under normal conditions. The Administration predicted that French spruce and fir production would initially fall from 1.2 million cubic meters to 670,000 cubic meters.

Impossible to measure but, according to the Administration, even more serious than the depletion of standing timber were wastes resulting from the pressure of circumstance: inadequate forest management and hasty, sometimes careless, logging. Trees were cut at the ages of optimum growth, and young trees were smashed unnecessarily. Skilled French forest personnel were in short supply, and, from the French viewpoint, Allied manpower did not completely solve the problem. As Theodore Woolsey, an American forester who served with the Forest Engineers, described in *Studies in French Forestry* (1920), early contact between French forest officials and the American forestry regiments was far from ideal. Timber was a cheap commodity in the United States but an expensive one in France. At first American logging practices



Devastation was widespread along the Western Front. This was the largest remaining tree in the former "no-man's-land" near Richécourt, Meuse, in November 1918.

reflected this difference, but most of the disputes were resolved and an effective working relationship emerged.

The cost of neglecting forest investments during the war was also disastrous. Forest roads had not been maintained, and expensive repairs were now required. Replanting had been postponed too long, and often site conditions had deteriorated. The dry summer of 1921 made matters worse by destroying many of the post-war plantations.

On a national level, the losses of growing stock and the heavy costs of overdue investment could be covered over a period of years, even though there were to be no reimbursements through German reparations. And from a French point of view, the reacquisition of Alsace and Lorraine, rich in softwoods, was a positive gain.

But the hardships of the timber industry were not evenly distributed. Sawmill operators and their employees were usually dependent upon a regular supply of local wood. Interruptions of this supply, caused by wartime overcutting, could be individually disastrous, especially when coupled with the collapse of timber prices in 1920–1921. On balance, it can be said that World War I severely disrupted, but did not paralyze, French forest production. □

This article is reprinted from Journal of Forest History 22 (October 1978): 226–27.

