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Liam Kennedy

### **“The People’s Fuel”: Turf in Ireland in the Nineteenth and Twentieth Centuries**

The role of turf or peat in Irish national development is, to say the least, controversial. Robert Kane, writing in the mid-nineteenth century, envisaged a major contribution to economic growth and welfare from this natural resource. More than a century and a half later an edition of Keven Myers’ “Irishman’s Diary” in the *Irish Times* consigned turf to the rubbish heap of national fantasies: “Once upon a time, we built a state around the concept of a Gaelic-speaking, peat-fired economy, and then stood on our quaysides bidding tearful farewells to our young people.” Recent historical scholarship seems to concur, at least as far as the industrial exploitation of turf is concerned.

The focus of this paper, however, is on turf as a source of heat and energy for households. Ireland was a largely agrarian society in the nineteenth century, and, with the notable exception of the northeast of the island, modern industrialization did not take root until the later twentieth century. Domestic fuel supply was the critical energy issue. Arthur Young was one of the earliest to observe how Irish cottiers benefited from easy access to home-produced fuel, as opposed to the English laborers shivering in their cottages and dependent on purchased coal. The subsistence crops of potatoes and turf constituted the mainstay of living over much of Ireland before the Famine, and were important for long afterwards. There are various impressionistic accounts of the quantity of turf used by rural households in the first half of the nineteenth century, though these are far from plentiful, and of course the quality of the turf varied within a particular bog and between bogs. Only one source, to my knowledge, gives hard evidence for the amounts saved. This is the *Turf Account Book* of 1859–60 from the Coolattin estate in County Wicklow and now in the National Library of Ireland, ms. 4987. A preliminary analysis of these account books suggests wide variation in the amounts of turf saved, with 40 kishes per annum being the median figure. There is the awkward issue of once popular but now obscure measures, based on volume rather than weight. No doubt there were kishes and kishes, depending on the part of the country. Wakefield suggested the dimensions of a kish were 4 x 2 x 3 feet, or 24 cubic feet. McEvoy’s estimate was a little higher at a cubic yard (27 cubic feet), though this seems to refer to a heaped kish, so the two estimates may well be very close. Estyn

Evans provided photographic evidence for the size of a kish, with dimensions implying that a kish equaled 22 cubic feet. As archaic measures go, the range of values is reassuringly narrow. On balance, Wakefield's estimate may be the one to be preferred. On the basis of information supplied by Wakefield, it is possible to calculate that a kish weighed 444 lbs or almost exactly four hundred weights (of 112 lbs each). There is nothing that can be done in relation to the problem of variations in the quality of turf, in view of the absence of any price data for the estate.

Forty kishes would imply the production and consumption of eight tons of turf per household per annum, on the above assumptions. It might be reckoned that standards of firing, as with other items of consumption, were somewhat lower before the Famine. On the other hand, for most households the amount of turf available depended almost exclusively on two factors: weather conditions and household labor. Labor was more plentiful before the Famine. Still, the standard of housing, including the number of hearths, was higher around 1860 compared to some decades earlier, and housing on the Coolattin estate was probably better than in the western parts of the island. Much of the poorest housing on the estate had been pulled down during and after the Famine. An early-twentieth-century estimate puts the consumption of turf higher, however, as does incomplete experimental work by the author using modern hand-won turf on an open-hearth fire. For present purposes, eight tons per household per annum will serve as a crude approximation.

Similarly crude forms of estimation help to paint a picture of the output and consumption of turf on a countrywide basis. Turf was an almost pure subsistence good, even more so than potatoes, with most of the produce destined for home consumption or local markets. The high volume-to-value ratio made turf an unattractive commodity for sale in the context of the transport technology of nineteenth-century society. If roughly 90 percent of turf was for personal or highly localized consumption, as seems likely, then the principal determinant of turf production was a demographic factor, that is, the number of households in rural and village Ireland.

Most rural households used turf, as did many town dwellers in provincial Ireland. In view of the rich boglands stretching across the central plain of Ireland, it seems reasonable to conclude that turf was widely available in the towns of the Irish midlands, as well as, of course, in the countryside. The east-coast towns seem to have depended primarily on

coal, most of it imported in view of the limited production from the Irish collieries at Castlecomer, Ballycastle, and Coalisland. In the 1840s the Grand Canal brought in approximately 30,000 to 40,000 tons of turf per annum to Ireland's capital, Dublin, but this would have covered only a fraction of Dublin's fuel needs. The table below contains a set of estimates of the production and consumption of turf in Ireland in the nineteenth century. Turf being a subsistence good, the two should be much the same. The steps in the argument are fairly self-evident. Consumption of turf is assumed to be eight tons per household. The number of households can be taken from the censuses of population. About two-thirds of households probably burned turf, though if anything the proportion may have been higher during the first half of the nineteenth century, when coal imports were limited.

	1801	1845	1851	1926
<b>Population</b> (thousands)	5,000	8,400	6,516	4,229
<b>Mean household size</b>	5.2	5.6	5.4	
<b>No. of households</b> (thousands)	962	1,500	1,207	
<b>Proportion turf-using</b>	68%	68%	65%	"half"
<b>Turf-using households</b> (thousands)	654	1,020	784	
<b>Consumption</b> (thousands of tons)	5,231	8,160	6,275	3,600*

\* Official estimate of turf output in the Irish Free State (26 counties). There are no figures for the newly-created statelet of Northern Ireland (6 counties), following the partition of the island in 1921.

In the first half of the century, the trend in turf production and consumption was undoubtedly upwards, as the numbers of households multiplied. This must have also been true of the eighteenth century, especially during the period of vigorous household formation from the mid-1740s onwards. In round figures, the information in the table would suggest the production of some five million tons of turf about the time of the Act of Union (1800), a massive eight million tons on the eve of the Famine, then falling to six million tons by the end of the Famine at mid-century. The trend after 1846 was inexorably downwards as households and hearths were extinguished through death, migration, and emigration. The effect of demographic change was reinforced by economic forces. Coal was making inroads into urban Ireland and its hinterland. For example, markets not only for turf but also for coal appeared in turf-rich, inland areas such as Strabane and Omagh in the 1880s. The penetration of the countryside by coal imports is not known in

any detail but was aided by developments in road, rail, and sea transport. Cost-reducing innovations in the coal-mining industry also meant that competitive pressures were unrelenting. It is likely that the decline in the production of turf was slowed by the demand caused by rising standards of comfort and the more extensive cooking of foodstuffs for animals, maize in particular, on the part of turf-burning householders.

Still, the remarkable aspect of turf is its resilience. When the Irish Free State produced estimates of turf production for the first time, for the year 1926–27, the aggregate output was 3.6 million tons. The inclusion of turf from Northern Ireland, for which no figures appear to be available, would edge this total up still further towards four million tons or so per annum. This suggests that output roughly halved between 1845 and 1926. This seems dramatic until one takes into consideration the fall in population in Ireland during this period. The decline in turf production turns out to be much the same as the decline in population, which for the island of Ireland was almost exactly 50 percent between 1845 and 1926. Over the same period, the number of households declined by just 37 percent, indicating that households were becoming smaller over time. Turf production and consumption fell by 49 percent. There was thus a shift in the direction of burning coal for domestic needs. Still, this hardly represents an easy victory for King Coal.

Output declined, as the numbers indicate. However, the decline was largely invisible. Landscape painting in Ireland, from Paul Henry to John Luke, gives not a hint of the gradual retreat of turf, while sentimental ballads from the “Old Bog Road” to Johnny Cash’s “Forty Shades of Green” perpetuated the image of a turf-burning people. The paradox is easily resolved by distinguishing between aggregate production and production per household. The fact is that most rural households, and many in the villages, still used turf rather than coal or wood up to the early 1950s. The decline in turf production and consumption at the *household* level was a remarkably gentle one in the century after the Great Famine. Change was much more noticeable at the aggregate rather than the household level. This tendency was in fact reversed in the 1930s and the 1940s, though under rather special circumstances.

The output of turf of 3.6 million tons in 1926–27 may be compared with an import of 1.8 million tons of coal into the Irish Free State in 1926, valued at £3.4 million. The official valuation of turf production in 1926–27 was £3.3 million, a virtually identical value. As a significant proportion of the coal must have been destined for non-domestic use in

industry, on the railways, and in public institutions, it follows that the dominant domestic fuel was still turf in the 1920s. This was true not only in terms of volume but also in terms of value. For some years during the Economic War (1932–38), when the Irish Free State sought to “burn everything English except its coal,” to borrow a phrase from Jonathan Dean Swift, and much more importantly during World War II, the rising tide of coal imports was reversed. Because the major competing fuel was simply not available for domestic consumption during World War II, turf was virtually the only show in town as far as the domestic fuel market was concerned. It was also adapted, although with much less success, to power trains and small-scale industry. Wood made a minor contribution, but Ireland was one of the least forested countries in Europe. Taking the long view, the major retreat of turf as a domestic fuel did not come until the 1950s, when cheap supplies of coal and oil made heavy inroads into the Irish energy market.

Any conclusions must be tentative at this stage, but the following seem warranted, at least on the basis of the evidence and assumptions made so far. Turf remained the major fuel resource of Irish households from the seventeenth to the mid-twentieth century. The production of turf expanded vigorously, in step with population, through the eighteenth century and up to the eve of the Great Famine. There are no signs of problems of depletion approaching the Famine, so fuel poverty was not a significant factor in a rural society experiencing rapid population growth and pressure on land resources. On the contrary, it is clear that turf made a significant contribution to the welfare of the rural population in 1845.

Once the Famine struck, the output of turf went into decline. This decline was especially marked after 1950. However, in the century after the Great Famine, it is perhaps the resilience of turf production and consumption that is most striking. While overall turf production declined, as did rural population, production *per household* registered only a mild decline.

This is all the more remarkable given that there is little evidence of technical change since the seventeenth century in the “winning” of turf from the environment. The contrast here with coal, which enjoyed streams of cost-reducing innovations, is striking. Presumably the persistence of turf, and of other forms of subsistence production, was in large part a function of underemployment in the countryside and the low cost of family labor.

**Further Reading**

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