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Op-Ed Contributor

# The Fungus That Conquered Europe

By JOHN READER

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THE feast of Ireland's patron saint has always been an occasion for saluting the beautiful land "where the praties grow," but it's also a time to look again at the disaster that established around the world the Irish communities that today celebrate St. Patrick's Day: the Great Potato Famine of 1845-6. In its wake, the Irish left the old country, with more than half a million settling in United States. The famine and the migrations changed Irish and American history, of course, but they drastically changed Britain too.

Americans may think of the disease that destroyed Ireland's potato crops, late blight, as a European phenomenon, but its devastations actually started with them. The origin of the fungal organism responsible, *Phytophthora infestans*, has been traced to a valley in the highlands of central Mexico, and the first recorded instances of the disease are in the United States, with the sudden and mysterious destruction of potato crops around Philadelphia and New York in early 1843. Within months, winds spread the rapidly reproducing airborne spores of the disease, and by 1845 it had destroyed potato crops from Illinois east to Nova Scotia, and from Virginia north to Ontario.

It then crossed the Atlantic with a shipment of seed potatoes ordered by Belgian farmers. They had been hoping that fresh stock would improve their yields. Unhappily, it brought the seeds of devastation.

The warm damp spring of 1845 enabled late blight to become an epidemic. By mid-July, the disease had spread throughout Belgium and into the Netherlands. It went on to infect an area from northern Spain to the southern tips of Norway and Sweden, and east to Northern Italy. It moved inexorably through the British Isles and reached Connemara, on Ireland's west coast, in mid-October. The ruin of Europe's potato crops was complete.

Nothing like it had been known before. Neither the Vandal hordes nor the bubonic plague had penetrated Europe so deeply and so fast. The failure of the crop was a disaster for every farmer, market gardener and family in Europe that relied on potatoes. Few were unaffected; in Ireland, a population that in 250 years had grown from one million to more than eight million, solely because of the potato's unrivaled quality as a staple food, was threatened with starvation.

The first intimations of Ireland's looming calamity reached the British government in August 1845. Although Britain was responsible for the social and economic iniquities which had made Ireland so susceptible, the government of the day deserves some credit for its efforts to avert mass starvation. There were political as well as logistical difficulties.

The Conservative prime minister, Sir Robert Peel, without seeking the approval of either cabinet or Parliament, authorized the banker Sir Thomas Baring to secretly buy £100,000 of American maize for shipment to Ireland. But before any official relief program could proceed there was a political obstacle to overcome: Britain's Corn Laws, which imposed exorbitant duties on imported grain to ensure that it could never be cheaper than home-grown produce.

To Peel it was obvious that the Corn Laws would have to go, but his electorate of large landowners was vehemently opposed to their abolition. The Duke of Wellington, leader of the House of Lords, complained that Ireland's "rotten potatoes have done it all — they put Peel in his damned fright." Peel drew heavily on the news from Ireland as he urged Parliament to vote for abolition:

"Are you to hesitate in averting famine which may come, because it possibly may not come? Are you to look to and depend upon chance in such an extremity? Or, good God! are you to sit in cabinet, and consider and calculate how much diarrhea, and bloody flux, and dysentery, a people can bear before it becomes necessary for you to provide them with food?"

The bill abolishing the Corn Laws was passed in May 1846 in the House of Commons, with two-thirds of Peel's party voting against it and the entire opposition voting in favor. A month later, Peel was out of office.

As it turned out, far from Britain being flooded with cheap wheat, within weeks of the abolition the price of grain had reached heights rarely seen before. Speculation was rife, with dealers buying grain futures at two and three times the price of a few months before, draining the country's gold reserves and eventually threatening the stability of the Bank of England itself.

Then, as fate would have it, the summer of 1847 brought news that Ireland's potato crop, though small, was doing well. The grain harvests also promised to be exceptionally good. Prices tumbled just as the grain bought months before at inflated rates began arriving in the ports.

Dealers who had gambled on high prices now found themselves unable to recoup their investments. Twenty major grain trading companies were brought down in September with total liabilities approaching £10 million. An additional 99 trading and related firms collapsed in October as the crisis spread, bringing down 11 country banks and three of the biggest in Liverpool.

The London banks, though, survived and went on to prosperity, for Ireland's famine, by ending the Corn Laws, prompted the beginning of the free trade that established the success of Britain's industrial economy. Still, the banking crisis had such an impact on the British mind-set that it is the benchmark against which commentators compare subsequent banking problems.

Not since the 1840s have we seen anything like this, they declared as the Bank of England stepped in last year to save the Northern Rock bank from a collapse caused by the subprime mortgage debacle — another American-born infection. At least our potatoes are safe.

John Reader is the author, most recently, of the forthcoming "Propitious Esculent: The Potato in World History."