

Today's BSE, HMD Mirror Medieval Pestilences

by William F. Wertz

Epidemics of livestock pestilences spread among livestock during the Great Famine in the early 14th Century during the years 1315-22, nearly a generation before the first of four outbreaks of the bubonic plague struck Europe beginning in 1347.

The early 1300s was the beginning of a Little Ice Age, which lasted until about 1700. During this period, severely cold Winters were followed by heavy rains and flooding in the Spring and Summer months. In 1316, the Baltic Sea froze over. The hardest Winter was 1317-18. During the Winter of 1321-22, the Baltic and parts of the North Sea froze over. Due to this Ice Age, communication with Greenland was gradually lost, Norse settlements there were extinguished, and cultivation of grain disappeared from Iceland and was severely reduced in Scandinavia. Overall, a shorter growing season resulted throughout northern Europe.

The terrible weather ushered in or laid the foundation for fatal diseases or murrains. Among draft animals, those affected were castrated bulls or oxen. Since these animals were used to plow fields, the diseases affected the ability of farmers to plow the fields for grain. Among food animals, those affected were primarily sheep and cows.

The initial and principal pestilential disease was rinderpest, a disease which affected ruminants (cud-chewing animals). Once the disease hit, it ran its course in a week or so. The infected animals manifested discharge around the nose, mouth, and eyes. These early symptoms were succeeded by stench, recurrent debilitating and explosive diarrhea with consequent dehydration and tenesmus (the animals attempt to defecate when nothing remains to be voided). Death was followed by rapid putrefaction.

Recently, observers have described the practice in England of slaughtering hundreds of thousands of animals with hoof-and-mouth disease, followed by the burning of their carcasses, as a throwback to the Dark Ages. In fact, during the early 1300s, the diseased animals were burned after their demise. However, the continuous rain often hampered the burning, thus forcing their mass burial.

The rains also made it difficult to cure (dry) hay for animal feed. As a result, in the Winter cold, stores of fodder would run out, thus weakening strong animals and making them more susceptible to disease through malnutrition.

Also, due to the perpetual rains, sheep suffered from liver fluke, an infestation of parasite worms. During 1319-22, especially cattle murrains, that "endured a long time," followed the wet weather pestilences.

Prelude to the Black Death

Another factor which contributed to the destruction of food production and distribution, was widespread warfare in the affected area of Europe. Until 1319, there was a dynastic struggle among Norway, Denmark, and Sweden. In 1314, there was war between Ludwig of Bavaria and Duke Frederick of Austria. There was also an on-again, off-again war in Flanders, as French troops tried to bring Flanders under French control. In the British Isles, the English and the Scots were at war. In 1315, Scottish forces invaded Ireland as a second front in their war against England. In the same year, Wales revolted against England.

As a result of both the natural disasters of this period and the aforementioned social chaos, sheep and goat flocks fell by as much as 70%, and "a great pestilence of oxen and cattle" affected especially Germany, France, and England.

The resulting "Great Hunger" afflicted an area of 400,000 square miles with a population in excess of 30 million. The population, which had been growing until 1300, began to decline, even before the later outbreak of the Black Death in 1347.

Because of hoarding and speculation, prices soared, for example, by as much as 800% in France. People were malnourished, and consequently more vulnerable to disease. A contagion of dysentery prevailed in these years.

Poor people who were in their thirties and forties when the Black Death began in 1347, would have been young children in 1315-22. The effect of the famine on such children would have resulted in the inadequate development of their immune systems, thus increasing the rate of morbidity among this generation during the subsequent Black Death.

Today, the danger is potentially greater, because of the rapid and widespread proliferation of the diseases as a result of globalization and the fact that, in the case of bovine spongiform encephalopathy (BSE, or "Mad Cow" disease), the disease is transmittable to human beings.

However, today, the spread of livestock diseases has been created not by a natural disaster, but rather by the man-made ideology of free trade and deregulation, as promoted by the likes of Margaret Thatcher. Moreover, its outbreak occurs not a generation prior to the outbreak of the Black Death as in the 14th Century, but in the context of an already-existing global epidemic of AIDS and other pandemic diseases, potentially threatening the continued existence of the human species.

Material for this article comes mainly from The Great Famine, by William C. Jordan, and A Distant Mirror: The Calamitous Fourteenth Century, by Barbara Tuchman.