Carnage from a computer
by Magnus Linklater

WE ARE USED to politicians suppressing the truth. When scientists do it as well, we are in trouble. Not one of the Government’s senior advisers, from Sir David King, the chief scientist, downwards, has yet dared to confirm in public what most experts in private now accept, that the mass slaughter of farm animals in the 2001 foot-and-mouth outbreak was not only unnecessary and inhumane, but was also based on false statistics, bad science and wrong deductions.

The mistakes that were made in attempting to control the outbreak are laid bare in a devastating paper recently compiled by Paul Kitching, one of the world’s leading veterinary experts, and published by the World Organisation for Animal Health. It finds that, of the ten million animals slaughtered, more than a third were perfectly healthy; out of the 10,000 or so farms where sheep were killed, only 1,300 were infected with the disease; scientists were wrong to claim that the FMD virus was being spread through airborne infection; the epidemic had reached its peak before the culling began; the infamous 3km killing zone was without justification; estimates of infected premises were little better than guesswork.

The language used in Dr Kitching’s report has a controlled anger about it. He talks of “a culling policy driven by unvalidated predictive models”, mentions the “public disgust with the magnitude of the slaughter” and concludes: “The UK experience provides a salutary warning of how models [statistics used to predict the course of an epidemic] can be abused in the interests of scientific opportunism.”

Those models used by the Government were badly flawed because they relied on computers rather than advice from vets and virologists who understood the nature of the disease. “No model will produce the right output when fed the wrong input,” says the report. The Government, late in reacting to the outbreak, fatally moved decision-making away from FMD experts to the Cabinet Office briefing room (Cobra). The result was “carnage by computer”, as one farmer put it — a slaughter that was “grossly excessive”, according to the report.

There are vital lessons here about how we should control future outbreaks, avoiding the horrendous cost and slaughter of the last. Thus far, there is no sign that those lessons have been learnt.