



FIGURE 17.3. (A) Change in fitness of the foot-and-mouth disease virus during the 2001 epidemic in the United Kingdom. At least 6 million animals were culled in order to contain the spread of the virus. (B) The estimated number of new infected farms that are generated by each infected farm, R . Despite a ban on animal movements, R remained above 1 until an extended cull was introduced in late March. R then fell below 1, and the epidemic declined. It died out much sooner in Scotland, where faster culling reduced R more effectively (see B). The long tail of the epidemic is due to geographically localized pockets of infection.

17.3A, courtesy Louise Matthews, CTVM Edinburgh; 17.3B, modified from Woolhouse M. et al., *Nature* 411: 258–259, © 2001 Macmillan, www.nature.com