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Epilogue

Over the last 25 years, since I first encountered RHD on a hot day in the wild hills of Almería, I have closely followed numerous lines of research to understand RHDV and the disease it causes.

Even now, the research continues. Almost every month a new paper is published somewhere in the world adding more knowledge. Most recently, Chinese workers (Wang et al. 2013) published a detailed atomic model of the virus, describing its precise shape and highlighting which of the outermost amino acids on the virus coat are most likely to be involved in the infection process. They even demonstrated how a few amino acids on the virus surface, a small peptide chain, can elicit an immune response from the rabbit that results in the formation of protective antibodies. That was quickly followed by another paper, also from China, exploring the use of 'loop-mediated isothermal amplification' to detect RHDV in samples of blood or other tissues taken from rabbits (Yuan et al. 2013). This has the great advantage that it could potentially be used in the field even without laboratory facilities; it would have been ideal to have had something like this available when RHDV first spread across Australia in 1995–96.

As understanding accumulates we are beginning to glimpse how information on changes in the genetics of viruses that circulate in a small field population of rabbits can help us frame more realistic mathematical models of the co-evolution of virus virulence and host resistance, but we do not have enough information to completely unlock the secrets of how a few small changes in the genome of the virus can change its virulence. Our imaginations open up pictures of what might be going on but the final details remain obscure.

The same can be said of the wider social context of this book. Ideas have been introduced on the importance of working within political frameworks, getting ideas onto national political agendas and informing the general public on health and safety issues. But they are too poorly analysed to be regarded as recipes for success in later projects of this kind. They are better seen as suggested stepping stones or points to consider before embarking on future work. Nevertheless, the spectrum of topics considered in this project goes much further than any simple concept of applied ecology confined to the immediate practical aspects of introducing a virus. To gather the fullest perspective it has been essential to consider the politics and how the press saw things, and to understand how working in a wide international sphere enabled essential progress to be made at critical times of the project.

Equally importantly, ideas about conservation ethics have been articulated. Some of these are especially challenging. The views put forward by some animal welfare proponents certainly need to be challenged. It is easy to become emotional on seeing a sick pet rabbit or by imagining the suffering of a virus-infected rabbit, but how should this be weighed up the pain felt by starving and thirsty kangaroos deprived of succulent food by over-abundant rabbits? Is the picture of starving rabbits dying in millions during a plague somehow more acceptable because