

## The ecological impact of RHD in Europe

Don't rely on a rabbit's foot for luck – after all, it didn't work out too well for the rabbit.

Anonymous

In October 1953, when the rabbit disease myxomatosis swept into Britain from France, people had mixed feelings about its immediate effect on the rabbit population. Many saw it as an abhorrent disease and argued that, if it could not be stopped, at least it should not be deliberately promoted. Subsequently, an amendment to the Pests Act 1954 was pushed through the British Parliament to make it illegal to spread myxomatosis deliberately. Nonetheless, most farmers were quietly pleased once they realised the economic benefits of having fewer rabbits. Freedom from the need to protect crops and pastures from an estimated 100 million rabbits was such a relief that Rabbit Clearance Societies were widely set up to help keep rabbits in check when the initial effectiveness of myxomatosis eventually began to wane (Thompson 1994; Fenner and Fantini 1999).

In complete contrast to Australia's astounding lack of interest and reporting on the environmental consequences of myxomatosis, information was more forthcoming on the changes seen in Britain's farms, natural vegetation and wildlife. Much of this, including anecdotal comments, was brought together in 1985 by two authors with the ever-so-English-sounding family names of Sumption and Flowerdew. The summary of their review is worth quoting in full to show the depth of understanding available (Sumption and Flowerdew 1985).

The consequent decline in the rabbit population caused dramatic changes in agriculture and the native fauna and flora. It promoted woodland regeneration and increased grassland and cereal production; herb and grass height increased, flowering was noticeable and plant successions ensued. Some small legumes and annual plants became extinct locally and much floristically rich vegetation became dominated by a few grass species or shrubs. The increased grass growth probably promoted an increase in the number of many invertebrate species as well as in the vole (*Microtus agrestis*). Some species of insect became reduced in number and the Large Blue butterfly (*Maculinea arion*) has become extinct (1979) since the decline of the ant (*Myrmica* spp.) fauna necessary to rear the butterfly larvae. Breeding sites for the sand lizard (*Lacerta agilis*), stone curlew (*Burhinus oedicephalus*) and wheatear (*Oenanthe oenanthe*) have been reduced by habitat change. Immediately after myxomatosis many predator populations suffered from a lack of rabbit prey with consequent poor breeding success, but those able to switch to voles, and other predators which are no longer taken in rabbit trapping, have increased in numbers, e.g. fox (*Vulpes vulpes*), polecat (*Mustela putorius*), short-eared owl (*Asio flammeus*) and kestrel (*Falco*