

D. S. Falconer

Douglas Scott Falconer, or D. S. Falconer as he normally styled himself, died on 23 February 2004, within days of his 91st birthday. His health had deteriorated and his eyesight, sadly, was failing, but he was able to retain many of his interests until his brief final illness. He had been for many years a prominent member of a remarkable group of geneticists that the late C. H. Waddington had gathered in Edinburgh after the second world war, and for a long time he was regarded as a leading authority in the area of quantitative genetics.

The great and the good often become subjects of anecdotes, and Douglas was no exception. I like the one about him dining in an ocean-going liner in the 1950s. When the steward collected his plate, Douglas remarked: ‘That was a very good piece of rabbit, thank you’. The menu had specified chicken, which was still a luxury item in those days, but the cheaper rabbit meat was often substituted, though few caterers would admit (or indeed need to admit) to the substitution. Douglas’ remark therefore caused consternation, and even the chief steward was called. He assured Douglas that a reputable shipping line like theirs would never – and he meant *never* – submit passengers to inferior products, perish the thought. Douglas held his ground: ‘I think, if I may say so, that I have done enough dissections in my time to distinguish a rabbit bone from a chicken bone. That was very good, thank you, but it was rabbit’.

That anecdote reflects several layers of Douglas’ character. The first was his characteristic politeness; indeed, if he became irritated, the greater and the more emphatic his politeness would become. But this could obscure a steely resolve if something became an issue. He would not normally have made catering standards into an issue – gourmet eating was not his style. But Douglas had standards of truth and honesty that were not to be compromised. And finally, he had a depth of knowledge and expertise that was not normally advertised, and could remain unsuspected, but that could be used effectively if the need arose.

For readers of *Genetical Research*, Falconer’s professional achievements are well-known, and need not be reviewed in detail here. In any case, a special issue

of this journal, as a tribute to his work, was published in 1999. He is perhaps best known for his experimental work on selection theory, working on his favourite experimental animal, the laboratory mouse. He began his mouse genetics work, in Cambridge, on linkage groups, and he never lost his subsidiary interest in the topic. In fact, he was never happier than when he was classifying mutant mice in his laboratory, using the special marker stocks which he had developed. But that was basically just a hobby for him. One of the more important developments with which he is associated was his use of the genetic correlation to measure how a trait measured in one environment responds when selection is practised in another. That treatment now sounds routine and has long been accepted as an integral part of selection theory. But at the time, Falconer’s 1952 paper on the subject in *The American Naturalist* was a critical innovation, from which stemmed a substantial body of theory and experiment. Strangely, the later editions of his book dropped all reference to this paper, yet it remains (to my mind) one of his more important ones. Perhaps he saw it differently.

Though his main work, as has been said, was conducted on the mouse, he contributed greatly to the understanding of human diseases and disabilities through his treatment of threshold characters. It was again a highly innovative piece of work, and it took his thorough and systematic approach to quantify and formalise what had previously been a vague notion of genetic liability to a disease.

Falconer will long be remembered as an original and productive research worker, but he is perhaps even more widely known for his book *Introduction to Quantitative Genetics*. In the forty-plus years since it was first published, it has been of immeasurable value to, by now, several generations of students to whom quantitative genetics would otherwise have remained *terra incognita*. Falconer always was a superb teacher – lucid, logical, enthusiastic, patient, sympathetic. His book displays all these qualities to the full, not least because of his gift for presenting abstract material in simple terms that call only on some basic skills. Without ignoring at all the value of his

research, it is perhaps the book that represents Falconer's greatest legacy to his own branch of genetics.

Douglas had many interests outside his work. He had a great love of music, and was very knowledgeable about it. He had been a keen vocalist, and was a flautist till his eyesight failed him. He was also an avid

naturalist, with a detailed knowledge of all aspects of wildlife. He had a deep interest in the countryside, and it was a sadness for him when increasing disabilities curtailed his hill-walking.

He is survived by his wife Margaret, and their two sons, Andrew and John.

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