

Frederick Bruce Hutt

August 20, 1897 — September 6, 1991

Because of his outstanding background, training, and experience, Frederick Bruce Hutt was invited to Cornell in 1934 to become the second Chairman of the Department of Poultry Husbandry, replacing the popular “Jimmy” Rice who had retired after serving approximately 35 years as the Chairman of the Department which he originated at the turn of the century.

Hutt’s academic career began with a B.S.A. degree in Poultry Husbandry in 1923 from the Ontario Agricultural College in Guelph, Ontario, Canada. This was a follow-up of his interest and experience with chickens that began in 1909 and included raising chickens as a source of income to pay his way through college. He earned the M.S. degree in Genetics in 1925 from the University of Wisconsin. A position as Lecturer in Poultry Husbandry at the University of Manitoba, that permitted time for continued graduate work, led to a M.A. degree in Zoology in 1927. To advance his knowledge of animal genetics, he took a leave and went to the University of Edinburgh in Scotland for a Ph.D. in 1929. Based on the extent and quality of his research over the next 10 years, he earned a D.Sc. degree in Genetics from the University of Edinburgh in 1939.

In 1931, Dr. Hutt went to the University of Minnesota as Professor of Poultry Husbandry and Animal Genetics. Members of the Poultry Science Association, which included many that had been or were at Cornell, recognized his many abilities and elected him President of the Association in 1932. He was the youngest person ever to hold that position.

At Cornell, President Edmund Day soon recognized Hutt’s capabilities and moved him from the College of Agriculture to the College of Arts and Sciences as Chairman of the Department of Zoology, a position he held from 1939-1944. During this period, he continued his research at the Poultry Department and taught a course in Human Genetics.

Professor Hutt’s teaching at Cornell began with a course in Poultry Genetics that continued for about 30 years. In 1949, after gathering research information over the years for his lectures from his own research and that from all over the world, he wrote the classic work, *Genetics of the Fowl*, which soon became the “bible” for all those interested in poultry genetics and poultry breeding. Its importance and need all over the world led to its translation into Spanish and Polish.

Soon after his return to full time at the Poultry Department, without any administrative responsibilities, his long-term interests in genetics of domestic animals and resistance to disease led, with the approval of Dean Hagan of the College of Veterinary Medicine, to a course in genetics designed especially for veterinary students. The purpose was to teach them the role of heredity as it applied to their profession. He taught this basic course for 20 years and used only material dealing with animal traits of interest to the veterinary student rather than those involving the fruit fly or plants when such was needed to explain the basic principles of Mendelian genetics. This was the first time such a course was taught at any veterinary college. This activity led in 1964 to another excellent text book, *Animal Genetics*. A little earlier (1958), he had written another book – *Genetic Resistance to Disease in Domestic Animals*. After retiring in 1965, as then required, a continuing request from many people for information on genetic traits of importance to dogs led to his *Genetics for Dog Breeders* in 1979. Then, in 1982 with the help of a former graduate student as junior author, he prepared the 2nd edition of *Animal Genetics*. All of his books, like his scientific publications, were extremely well written in a form easily understood by laymen and scientists alike. He would cite the facts from the literature, rather than opinions or beliefs, and then state his interpretations of the information provided.

His extensive research in genetics, especially of the fowl, involved many traits and thus added much to the existing knowledge of heredity in poultry. He constructed the first chromosome map for the chicken. Among the 250± scientific publications was one concerning his discovery of the sex-linked gene that causes dwarfism. This gene is now used around the world to produce economically efficient mothers of broiler chicks.

Throughout his long professional career, Dr. Hutt emphasized the role of heredity in resistance to disease of all types. He demonstrated how to use proper procedures for the selection of breeders that could lead to better viability, in spite of the presence of disease producing agents or conditions such as poor nutrition. He set an excellent example of neatness and orderliness in all his research records and other material, including that used in classes, and encouraged his graduate students to do likewise. His critiques of seminars and of papers being written by students bore forewarnings that these be not only factual but also correct in diction, spelling, and grammar.

At seminars and scientific presentations by others, he would often ask very specific and incisive questions. They would often force the speaker to come to some conclusion or to recognize that other information had not been considered. A common question involved the extent to which heredity might have played a part in the findings when the subject being discussed was not one of genetics.

Professor Hutt enjoyed using examples to illustrate the strong influence of genetics on resistance to diseases. On one occasion, he lectured to animal scientists on the potential value of selecting for resistance to mastitis in cattle. He suggested that if oysters could develop resistance to a specific disease, as they had done at Malpeque Bay in Canada, so might cows. He was also very responsive in a similar manner to some questions. At an evening banquet in England, Dr. Hutt was introduced to a famous Englishman, Dr. J.B.S. Haldane, who responded – “you must be the chicken geneticist.” The answer was – “no, I am the fowl geneticist – but please make sure you spell that word correctly.”

His office door was always open to anyone who wanted help, advice, or information. Many times it did not involve genetics, but, if in the field of biology, he often could provide an answer. His memory of what had been done and by whom many years ago provided answers to many questions.

Fred Hutt had many interests in the early years following his birth in Guelph that continued throughout life. At the early age of 8, he sent a letter to the local newspaper in Guelph pointing out that their report of the date of return of a specific butterfly was incorrect. He had seen that butterfly at two different locations which he then specified. As a teenager, his collection of insects became a source of specimens needed by some of the college students to meet their quotas for Entomology courses. Other interests involved wild birds, upon which he published several articles, and stamp collection where he concentrated on those of Britain and the Commonwealth.

Dr. Hutt served on the Editorial Board of the *Journal of Heredity* for 25 years. He was a visiting lecturer at many universities in the United States and elsewhere. He also served as a consultant to commercial poultry breeders in England and the United States. He was a member of 10 or more scientific societies or associations.

He received many awards for his outstanding accomplishments that started with the Poultry Science Association Research Award in 1929 and later their Borden Award for Research in 1946. He received the Tom Newman International Award for Poultry Husbandry Research in 1960 for his discovery and detailed study of the sex-linked gene for dwarfism in chickens. The ones he appreciated most were being made an Honorary Fellow in the Royal Society of Edinburgh in 1975 and elections to the American Poultry Hall of Fame in 1980 and to the International Poultry Hall of Fame in 1988. He also received an Honorary Doctor of Science degree from the University of Brno, Czechoslovakia in 1965. This was especially significant since it was at this institution, then listed as in Brüun, Austria, that the science of genetics had its origin under Mendel. His alma mater, the University of Guelph, bestowed the Honorary Doctor of Science degree on Dr. Hutt in 1974.

Professor Hutt is survived by two sons, Bruce and Robert; a daughter, Margaret; thirteen grandchildren; and twelve great grandchildren. There are many others, not genetically related to him, who will continue to remember Professor Hutt for his wit and for his contributions to their erudition, education, training, knowledge, and careers related to poultry science and the poultry industry.

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