

FRED ROBERT BEAUDETTE
DISTINGUISHED AVIAN MICROBIOLOGIST
AND PATHOLOGIST

1897 - 1957

THE untimely death of Fred R. Beaudette on January 17, 1957 at the still productive age of 59 has deprived the scientific world, and especially the veterinary profession and the poultry industry of an outstanding expert in the field of poultry disease research. He was born in Wichita, Kansas on April 15, 1897. In 1922 he married Velva Rader of Caney, Kansas. They raised three sons, Robert R., New York City, N. Y.; John H., Poughkeepsie, N. Y.; and Thomas R., Denver, Colorado. This tribute is dedicated to Fred by his many friends and colleagues in his chosen field of research—avian diseases.

Dr. Beaudette was one of the pioneers of a second generation of American avian veterinary microbiologists; the first generation included such men as V. A. Moore, Leo F. Rettger, L. D. Bushnell, Cooper Curtice, A. R. Ward, H. W. Graybill and E. E. Tyzzer. Although Fred, or "Red" as many of his colleagues knew him, died prematurely, his contributions to the poultry industry, veterinary medicine and biological science in general were those that would honor a much older man. He started his career in the field of avian veterinary science and teaching in 1919 after receiving his degree of Doctor of Veterinary Medicine from Kansas State College at the age of 22. He attributed his early interest, inspirations and training in the field of poultry diseases to Dr. L. D. Bushnell, who first



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hired him as Instructor in Bacteriology in the Kansas State College Department of Bacteriology and as Poultry Bacteriologist in the Kansas Agricultural Experiment Station. In addition to aiding in the teaching of veterinary bacteriology, he initiated a course in poultry bacteriology for poultry majors, and had charge of the poultry disease diagnostic laboratory which furnished ample material for research problems. This latter is evidenced by the number of papers published by him or in cooperation with Dr. Bushnell in the four years (1919 to 1923) he was a member of the staff of the K. S. C.

In 1921, Beaudette was promoted to Assistant Professor, an assignment he held when he left Kansas in June 1923 to accept a position as Assistant Professor at Rutgers University. In 1925, Rutgers University promoted him to Associate Professor and in 1929 to Professor, the position he held until his death. From 1923 to his death, he was also Poultry Pathologist in the New Jersey Agricultural Experiment Station.

Dr. Beaudette was the first veterinarian to be employed by the New Jersey Agricultural Experiment Station to do research on avian diseases. It was through the efforts of Dr. A. D. Goldhaft, a New Jersey veterinarian who started specializing in poultry diseases in 1914, and a group of poultry industry leaders, that Beaudette was hired in 1923. According to Dr. Goldhaft, the initial interest in this field of research in New Jersey followed the loss of 50,000 ducks in 1917 by the Huey Duck Farm from an undiagnosed cause but it took six years to get funds and find a qualified man for the job. In 1925, through efforts of a similar group in Vineland, a branch of the state laboratory at New Brunswick was established. Dr. James Black, Kansas State Agricultural College Extension Veterinarian and a former student of Drs. Bushnell and Beaudette was hired to take charge of this laboratory, a position he held until his death in 1955. In 1927, further expansion of the research work at the New Brunswick laboratory was made possible by the employment of Mr. C. B. Hudson, a bacteriologist also trained by Dr. Bushnell of Kansas State College. Thus the team of Beaudette, Black and Hudson was established.

Until 1954, poultry disease research in New Jersey was a function of the Department of Poultry Husbandry. In 1954, Rutgers University established a Department of Animal Pathology and recognized Beaudette's years of service and professional ability by appointing him the first chairman of the new department. Poultry pathology was transferred to the new department and continued to be Beaudette's field of research and teaching in addition to administration of other activities in the field of veterinary science.

Fred Beaudette won many honors in recognition of his scientific accomplishments and for services rendered to the poultry industries of not only his adopted state of New Jersey but of the United States and the world at large. These honors included the Borden Award in Poultry Science in 1944; a citation in 1948 by the New Jersey State Grange on his 25th Anniversary at Rutgers University; the "Golden Egg" honor with a \$1,500 check and a television set by the New Jersey Poultry Association in 1949; the Tom Newman Award of the Great Britain Poultry Association in 1950 for being the "most outstanding worker in poultry husbandry research"; and, in 1951 election as a Fellow of Poultry Science Association. He was a member of a number of scientific societies and served on the editorial staffs of at least two Poultry Science Associations (1946 to 1951) and American Veterinary Medical Association (1947 to 1949).

In 1951 he was granted an honorary degree of Sc.D. by Rutgers University. In 1955, he was again honored by Rutgers with a Distinguished Research Citation for his "long, industrious and fruitful labors to enlarge man's knowledge of avian diseases."

A final recognition for service was given him posthumously on January 22, 1957 by the New Jersey State Board of Agriculture. On that day Dr. Beaudette, along with three other New Jersey Agricultural leaders, Irving T. Gumb, Charles W. M. Hess and Grace M. Ziegler were given "Citations for Distinguished Service to New Jersey Agriculture." The citation of Fred R. Beaudette is quoted below:

"New Jersey is proud of you as an adopted son, and

grateful that you chose our State in which to pursue your career as a poultry pathologist for more than one-third of a century.

"Our older poultrymen well remember how you lifted a great burden from their shoulders in 1933 when you emerged from your laboratory with the first vaccine for the prevention of laryngotracheitis, a great poultry scourge of that day.

"Again, in 1944, when a new disease threatened our flocks and heavy economic losses were being sustained, you were the first to identify the causative virus, thereby opening the doors for research leading to vaccines and preventive measures for Newcastle disease.

"You have been an effective and sympathetic teacher not only at Rutgers University but as a lecturer throughout the nation and in foreign lands. You have given freely of your time and your great talents to instruct thousands of practical farmers in methods of combatting avian diseases, thus increasing the production efficiency of our flocks and making possible the expansion of the poultry industry. The consuming public as well as agriculture has profited immeasurably.

"Uncounted beneficiaries of your outstanding achievements and men of the world of science and education acclaim this award by the State Board of Agriculture of the CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE."

I feel that I am well acquainted with Fred's professional background because it was my good fortune to be employed as his successor when he left Kansas State College in 1923. It was my first job after college and a tough one to fill, because Fred had left a lasting impression on students and staff alike as a brilliant student himself, an excellent teacher and was well established as a poultry disease expert. I shared a room with Dr. Jim Black, one of his former students, in the home of a family where Fred himself had roomed for several years before he married in 1922. It was not long before I realized what big shoes I had to fill because wherever I turned, I found

people extolling the virtues of "Red" Beaudette. These included daily praises and reminiscences by both my landlady and my roommate.

Since Fred had left before I arrived to take over his former duties, I had no chance to see what he looked like or to obtain his advice regarding my duties. He had the reputation as a teacher and as a public speaker of never using a note of any kind and consequently left no lecture notes for me. Dr. L. D. Bushnell, my chief, was of little help because he was of the school who believed in letting his staff members "find" themselves. Luckily, I inherited with my job a student assistant of "Red's" a senior, Charles J. Coon now of Sioux Falls, S. D. Coon was as old or older than I was and immediately assumed a role of an advisor. Without his guidance I'm sure I would never have survived my first year as Beaudette's successor. I might add that Dr. Bushnell himself was an excellent boss and teacher who never really let a young staff member "sink," and probably guided me through Charlie Coon, more than I realized at the time. Therefore, I feel that I learned to know Fred R. Beaudette by the sweat of my brow, and came to have great respect for him long before I met him personally for the first time two years after I became his successor.

The Fred R. Beaudette bibliography of 146 titles published as part of this tribute to him has been compiled through the cooperation of his former staff members at Rutgers University, Dr. A. D. Goldhaft and Professor V. D. Foltz of the Department of Bacteriology, Kansas State College. No doubt many popular press references have been overlooked, but every effort was made to include a complete list of his scientific publications. Attention should be called to the fact that this bibliography records only those papers authored or co-authored by Beaudette. An almost equally impressive list could be compiled of publications coming from his Rutgers' laboratories but authored by his colleagues working under him. Fred would want to give due credit for research accomplished by his many students and staff members, including the late Jim Black, C. B. Hudson, J. A. Bivins, A. Komarov, Barbara R. Miller, Helen E. Burd, D. C. Tudor, O. Schwabe and V. R. Kaschula.

Beaudette excelled as a writer of review type papers and was especially noted for his complete serial reviews on equine encephalomyelitis and Newcastle disease. A paper "Twenty Years of Progress in Immunization Against Virus Diseases of Birds" published in 1949 is another example. The book "Psittacosis-Diagnosis, Epidemiology and Control" edited by him is a proceedings of a symposium sponsored by Rutgers University in 1953 under his guidance and is further evidence of his ability to compile literature in a single text for reference purposes. For a number of years he edited a yearly review on poultry disease compiled by the cooperative efforts of workers in the field and the Northeastern Conference of Laboratory Workers in Pullorum Disease Control. This review was widely circulated and became a standard source of poultry disease references. One could always be sure that even a case report of a single outbreak published by Beaudette would contain a complete background survey of both English and foreign literature. Dr. Beaudette's ability to read at least six foreign languages was utilized to good advantage in preparation of his reviews. His collection of reprints of papers dealing with poultry diseases is probably the most complete in the world.

He believed in fullest cooperation with scientists in allied fields of both institutional and commercial research. An outstanding example is the cooperative efforts of Doctors Webster, Hughes and Pritchard of Rockefeller Institute of Medical Research in a complete study of fowl cholera. His research with Dr. Waksman and his staff in an effort to find antiviral agents is another example. One of the two strains of *Streptomyces griseus* used for Waksman's early studies on streptomycin is reported to have been isolated by Doris Jones from the throat of a chicken in Beaudette's laboratory. The development of a chicken embryo propagated infectious laryngotracheitis vaccine and his close personal supervision and control of its manufacture in cooperation with one of the pioneer laboratories producing poultry biologics until it was thoroughly field tested was an unusual but apparently successful university research-commercial production arrangement.

Beaudette was such a popular speaker on poultry disease subjects, that he had the reputation at one time in his career of spending as much time traveling in other states as at his own headquarters. His talents along these lines, however, gave his department at Rutgers University a national reputation for its poultry disease research. His fame as a speaker was not confined to the United States since his name has appeared frequently on programs in Europe. In 1954 he answered an urgent appeal from the Brazilian Government to come to that country to help its veterinarians and farmers develop a program to control the first epizootic of Newcastle disease to hit that country. In 1955, accompanied by his wife, he made a month-long flying tour of the African continent observing poultry pathology work in various countries, including Morocco, French West Africa, Belgian Congo, Union of South Africa, Portugese East Africa, Northern Rhodesia, Kenya and Israel.

One of the greatest tributes that can be paid to Beaudette was the respect the "dirt poultry farmer" had for him. The announcement of his name on any poultry program was a guarantee of a good attendance. This was not limited to farmer audiences. His schools for instructing veterinarians on poultry diseases were very popular in the early 1930's. His encyclopedic knowledge of his subject and his frankness in discussing poultry disease problems won him an enviable reputation. Many times his frankness irritated his audiences but they went away knowing exactly where he stood on any question.

He prided himself as a person who understood the applied as well as the fundamental phases of avian disease problems and could discuss them equally well with the veterinary practitioner, scientist, poultry farmer, farm advisor, hatcheryman, feed dealer and remedy salesman. His extensive bibliography illustrates this point. It will be noted that a great many of his writings were of a popular type. The wide variety of subjects and the thoroughness of their coverage demonstrates his wide interest in the field of his choice.

He was a virologist at heart and probably his second

interest was parasitology rather than bacteriology. If his research teams lacked support in any one area, it was in the field of histopathology. This, however, was until the past few years, a characteristic of many United States poultry disease research laboratories. In his earlier days, Beaudette believed that histopathological support was unessential to the solution of a major poultry disease problem. In recent years, he often admitted however that work in histopathology might have added even more to accomplishments from his laboratories.

The following excerpts from a commemorative statement made by Dr. William H. Martin, Dean of the New Jersey Agricultural Experiment Station, following his untimely passing make an especially appropriate closing paragraph to this tribute:

"Dr. Beaudette has long ranked with the greatest of the distinguished scientists who have brought glory to the New Jersey Agricultural Experiment Station down through the years. A brilliant investigator, his discoveries in the field of poultry pathology have meant savings of many millions to the poultry industry of the nation, and indeed of the entire world.

"To sum up, Dr. Beaudette's untimely death has taken from us a truly great man."

WILLIAM R. HINSHAW
Fort Detrick, Maryland

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OF

DR. F. R. BEAUDETTE

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