A Life for All Seasons

Introduction
Harold LeRoy Chute, known as Harold by friends and colleagues everywhere, achieved distinction not only as an avian pathologist, but also as a consultant, entrepreneur, fundraiser, businessman, politician, investor, public servant and philanthropist. He was engaged in several rather different professional pursuits at different times during his long and productive career. The focus of this biographical sketch will be his considerable contributions to avian health through research, diagnostics and teaching, his leadership in the early years of the American Association of Avian Pathologists, and his lifetime involvement in professional veterinary organizations. He was an expert in fungal diseases of chickens and a leader in the development of specific pathogen free (SPF) programs for commercial broiler flocks in Maine. However, he is a man of many interests and talents with a history of success in a variety of professional and personal pursuits.

Early days
Harold was born on September 4, 1921 in Winnipeg, Manitoba. The only son of Hilda Mae Stoddart and Kenneth Karl Chute, he moved to Nova Scotia in 1922 where he spent the next 23 years. His father was a small farmer, raising apples and keeping a variety of
livestock. Life was simple and cash money was scarce or absent, but Harold reflects on this period as a good experience. It also instilled at an early age the value of a dollar, and the incentive to work diligently for financial security. He attended a one room school for 11 years, and then transferred to Middleton High School, 12 miles away, where he graduated in 1940. His life path was uncertain at this point, as he worked first at home on the farm and then as a postal clerk in Halifax for the Post Office Canadian Civil Service for the next two years. The war was upon Canada at that time, and he recalls seeing naval vessels being marshaled into convoys in Halifax harbor for the wartime effort. He endeavored to join the military service, but flunked his physical and, instead, enrolled in Nova Scotia Agricultural College in Truro in 1942. This led in 1944 to a 2 year associates degree in agriculture on a degree program, which was designed to lead to continued study at a 4 year institution.

Veterinary school and higher education
His degree from NSAC had qualified him for advanced studies in one of two fields: agriculture or veterinary medicine. Harold thought veterinary medicine might be the best choice because it would enable him to get a job in the Provincial Government or he could go into practice. Since these options were attractive, he enrolled in the Ontario Veterinary College in Guelph, Ontario in 1945 and completed his program in May of 1949. He actually received two degrees, D.V.M and V.S. (Veterinary Surgeon) from the Ontario Veterinary College, under the University of Toronto. It was during this time (1947) that he married Marion Baker, who was raised just a few miles from his family home in Nova Scotia. Harold and Marion both worked hard to support his education and cemented a lifelong partnership. Harold was interested in research and academic pursuits from the very beginning, never seriously considering a career in veterinary practice.

This proved not to be the end of his formal education; two additional degrees were in his future. The first was a M.S. degree in Veterinary Pathology, received in 9 months from Ohio State University in 1952 when he was on a leave from the University of Maine. He worked with Dr. Clarence Cole on embryonic lesions induced by mycoplasma isolated from chronic respiratory disease and infectious sinusitis. While there he made lifetime friendships with Dean Chamberlain, Vance Sanger and Geo Gass.

After returning to the University of Maine, he proceeded to complete the requirements for the DVSc degree, which he received in 1955 from the School of Public Health at the University of Toronto under Dr. A.E. Rhodes, a highly recognized virologist. His thesis on “Infectious bronchitis in domestic chickens” was based on research conducted at the University of Maine. In 2006, Hiram Lasher recalled this work (still unpublished) as a good documentation of the early use of crude infectious bronchitis vaccines in the poultry industry.

The first job as a veterinarian
Following his graduation from veterinary school in 1949, he and Marion took a trip in their new Pontiac sedan to the Northeastern part of the United States on their way back to Nova Scotia where Harold had a job waiting in a diagnostic laboratory. Visits at a number of laboratories, including the New York State Diagnostic Lab in East Aurora
(with Saul Narotsky), the University of Connecticut (with Jungherr and Plastridge), and University of Massachusetts (with Van Roekel) preceded his final stop at the University of Maine in Orono. Harold arrived unannounced before lunch and found Dr. J.F. (Frank) Witter, the only veterinarian on staff, performing necropsies on chickens. According to Harold, Witter never looked up and a technician asked “who will I tell Dr. Witter is here?” Harold then said “tell him that Dr. Chute wants to visit with him”, perhaps the first time Harold had used his new title in this way. Witter apologized and spent the next several hours with Harold and Marion who left with a tentative job offer to come to Maine.

Harold continued on to Truro, Nova Scotia where he proceeded to work for the summer in a diagnostic lab under Dr. Errol E.I. Hancock. However, he returned to Orono for the formal interview in September and again with Marion and his life’s possessions on October 31, 1949 to start his professional career. He was appointed Assistant Professor in the Department of Animal Pathology, which was at that time moving into a newly constructed facility and had a vision of bigger programs for the future.

**Poultry health research**

Although Harold’s appointment at the University of Maine involved diagnostics and service (50%), and teaching (25%), it was through his 25% appointment to the Experiment Station that he was able to initiate a research program which proved to be his first love.

Aside from case reports, his first report on experimental work was on dead Newcastle disease vaccine, published in 1952 in the Canadian Journal of Comparative Medicine. He quickly developed an interest and considerable expertise in fungal diseases of chickens. At that time, problems with fungal infections were common in the Maine poultry industry as indicated by a case report by Witter and Chute in 1952 on aspergillosis in turkeys (JAVMA 121, 387-388). Furthermore, fungal diseases usually had a management dimension and Harold was well grounded in poultry management from his work in Nova Scotia. Harold published on a fungous infection associated with a caponizing injury (1955) and gave his first general paper on fungous infections in birds at the Bear Mountain meeting in 1955. He authored the chapter on fungal diseases in the 4th edition of Diseases of Poultry (1959) and was established as an international expert in this field. He continued to author this chapter in subsequent editions of this text. He also authored a comprehensive bibliography on fungal infections.

Harold quickly became integrated into the mainstream of poultry disease research, participating regularly in the Conference of Laboratory Workers in Pullorum Disease Control (now the Northeastern Conference on Avian Diseases), the Bear Mountain meetings (sponsored by Lederle Labs), the New Hampshire Poultry Health Conference, and the poultry pathologist conferences held in conjunction with meetings of the American Veterinary Medical Association. He published (with Torgny Fredericksen) in volume 1, number 1 of the new journal, Avian Diseases in 1957. He was senior author of a paper on phosphatase levels in coccidiosis (Avian Dis., 5:107-116, 1961), a paper that
incidentally represents the first co-authorship publication in avian medicine for the writer of this biography.

Harold also became the chief architect and spokesperson for what was first known as the “Maine Disease Free Flock Program.” The first documentation was a speech given at the 45th American Poultry Congress held in Minneapolis, MN in 1961. This program was based on the use of biosecurity measures to rear commercial broilers free of vaccinations and natural infections. At that time, broilers were grown in Maine in 10,000-20,000 bird houses. Harold noticed that certain flocks where no vaccines were given, and no disease was experienced, performed better. Implementation of a directed biosecurity program resulted in better livability and higher weight gains, compared to conventional husbandry, and was adopted by much of the poultry industry in Maine. Its principal focus was control of mycoplasma that was responsible for significant condemnations in broilers at processing. By 1962 this program was identified as the Specific Pathogen Free Program and was described in detail in Maine Agricultural Experiment Station report #106, pp 1-25 (1962). By this time, USDA-APHIS was appointing epidemiologists for detail at the Department in Orono. Doug Stauffer, the first in a line of several such epidemiologists, was a co-author on the aforementioned report on the SPF program. This program attracted much worldwide attention and was, perhaps, one of the seminal actions that created an awareness of the value of biosecurity in increasing the profitability of commercial poultry. Maine Agriculture Experiment Station bulletins #613 by Chute and O’Meara (1963) and #633 by Chute et al. (1964) provide additional information. However, Harold comments that the program was not uniformly successful, mainly because the industry did not follow procedures with sufficient rigor.

**Poultry health consulting**

Harold was active for more than 20 years as a consultant on many aspects of poultry health, providing services to poultry companies around the world on a frequent basis. In earlier years, he frequently performed caponizing services to broiler producers in the State of Maine. This provided an important supplement to the conservative salary structure at the University of Maine.

**Department of Animal Pathology – its rise and fall**

The Department of Animal Pathology at the University of Maine came into being in 1953, with Dr. J. Franklin Witter as department head. Although veterinarians were employed at the University for many years, this was the first time that the speciality of animal health had attained departmental status within the University, perhaps a reflection of the increasing importance of animal agriculture to the State of Maine. This development followed closely the construction of a new Animal Pathology building, now a wing of Hitchner Hall, which resulted from an appropriation of $150,000 by the State Legislature in 1950. Initially, the department consisted of Witter and Chute, along with E.H. Hitchner and a small number of support persons. Subsequently, the recruitment of David O’Meara, Melvin Gershman, Roscoe Cuozzo, Lois McDaniel and others fleshed out a multifaceted department with a responsibility for providing Pullorum-Typhoid testing services, manufacture of vaccines (federal licenses not yet required), diagnostic services, and, yes, research.
Although Witter provided steady administrative leadership, Harold was the catalyst that made the department a productive research unit. Harold brought energy and vision to the department. He was promoted quickly to Assistant Professor in 1953 and Professor in 1955. Harold also was director of the Pullorum-Typhoid testing service from 1959-1969. By 1960, there were about 30 persons on staff, with 4 veterinarians, several biologists, a microbiologist and assorted graduate students, USDA epidemiologists, and support staff. This number grew to about 60 persons by 1967. This significant expansion was funded largely by grants and contracts, most of which were secured by Harold on behalf of the Department. Harold developed considerable expertise and confidence in grantsmanship and fund raising which was to benefit him in later pursuits.

About 15 Master’s degrees were awarded during this period. Prominent among Harold’s students were Marcel Ginchereau (1955), Torgney N. Fredericksen (1957), Maximillian Otto Braune (1958), Lois S. McDaniel (1959), Arian Zarkover (1960), Dyrarl D. King (1969), and Elizabeth Barden (1969). Several other persons, later prominent in poultry health work, spent time with the Department, including Jerry Rountree, Louis van der Heide, Everett Bryant (undergraduate student) and others. Harold also recalls providing mentorship to summer student employees in the Department, including Carol Reed (daughter of Poultry Extension Specialist, Frank Reed), and Richard Witter (son of Frank Witter).

According to Harold, the Department developed during this period new Newcastle and bronchitis vaccines, refined diagnostic tests for Newcastle and bronchitis, developed the first MG and MS-free breeders, developed simple tests for aspergillosis, eradicated Pullorum-Typhoid from the state, completing a program which had begun in 1921. The SPF flock program was highly recognized and ultimately adopted by USDA. The department was considered among the leading poultry disease laboratories in the country for a number of years. Although this was a highly productive period for the Department and much support was received from the poultry industry in Maine, its principal accomplishments were not well recognized by University administrators. University support was limited and in 1968 the department was merged with 2 others into a Department of Animal Science. Witter was no longer Department Head. Harold saw the writing on the wall, and left the department in 1969 for another position at the University. Witter retired in 1971 and the decline of the poultry health group continued.

Maine Biological Laboratories (and Northeast Labs)
Harold played a role in the creation of Maine Biological Laboratories, which went on to become a major producer of poultry vaccines. According to Harold, this all started when new policies at the University of Maine caused the cessation of local vaccine manufacture by the Animal Pathology Department, which had been producing crude vaccines for infectious bronchitis and Newcastle disease since the early 1940’s. Harold and Ken Eskelund developed the idea of a commercial venture to fill the predicted void and became partners in the original company, although Eskelund would be president, and run the company. On this basis, Maine Biological Laboratories (MBL) was formed in
1957. Harold continued his involvement with MBL as a director 1957-1966, after which the company was sold to Norwich Pharmical Co

In 1961, Harold also partnered with Dr. Ken Eskelund and Dr. Bill Gerencer to start a poultry diagnostic service named Maine Poultry Consultants, which Gerencer managed for many years en route to his own distinguished career in poultry health. A few years later, they started Northeast Laboratory Services to provide analytical services in the areas of microbiology and chemistry. Harold served as a director of both companies until 1975.

**AAAP and other veterinary associations**

Harold was among the core group of movers and shakers in the poultry disease area that conceived and ultimately formed (in 1957) the organization known as the American Association of Avian Pathologists (AAAP). When Leland Grumbles, at the suggestion of Henry van Roekel, sent out questionnaires early in 1957 to selected poultry leaders on the idea of a new organization, Harold was on the list and responded with an enthusiastic “yes” to all questions. Harold was one of the 42 persons who attended the August 27, 1957 organizational meeting in Cleveland, OH and, at that meeting, was elected as secretary of the provisional organization for the next year. Harold made arrangements for the second meeting in Philadelphia on August 19, 1958 during which the constitution and bylaws of the AAAP were approved and the organization was officially established. Harold recalls that this was an especially hot and humid afternoon, long before the days of air conditioning. Harold tells the story that when, as secretary, he sent the list of charter members to Leland Grumbles, he inadvertently left his own name off. This oversight was corrected in the records, however. Harold was not a charter member of AAAP because this designation was reserved for those with 15 years of poultry experience, but he is one of the 99 original members of the organization (elected in Philadelphia or during the first year). He was appointed by editor, P.P. Levine, as an associate editor of Avian Diseases from its inaugural issue in 1957 through 1960. He recalls Dr. Levine as a consummate gentleman, who treated Harold especially well. Harold’s notes indicate his surprise and pleasure when president Ben Burmester announced at the annual meeting in 1962 that Harold had been elected as vice president. He thus became the 6th President of the AAAP, serving in 1963-64. He presided over the 1964 annual meeting in Denver. He served in many other capacities with the AAAP, including in later years a significant tenure on the History Committee of which he was one of the original members, and the Finance and Planning Committee. He was elected to Life Membership in 1993.

He is a life member of the American Veterinary Medical Association, attending annual meetings regularly (all but 2 in 50 years) and representing the Maine Veterinary Medical Association on the AVMA House of Delegates from 1980-1998. He has been a member of the Board of Veterinary Examiners for the State of Maine 1975-1990. He was a member of the Maine Veterinary Medical Association and served as president 1969-1970. He was a member of the Veterinary Medical Advisory Council of the New England Board of Higher Education from 1972-1974. He was a life member and past president (1971) of the American Association of Veterinary Laboratory Diagnosticians
and in 1985 was a recipient of the prestigious Pope Award, given by this organization. He had served on the finance committee of AAVLD for years, where he had earned the nickname, “Mr. Greenspan,” the then chief of the Federal Reserve, in recognition of Harold’s frugal fiscal policies.

Harold’s interest in and involvement with professional veterinary medicine did not cease when he left formal employment with the Department of Animal Pathology in 1968. He has remained involved on committees and has attended scientific meetings into his 90th decade.

Harold was elected, in 1949, to membership in Phi Kappa Phi, an honorary scholarship organization founded at the University of Maine, served as its president, 1970-1971, and ultimately was elected an honorary member. He also was elected to membership in Sigma Xi, a scientific honor society and served as its president as well.

He has received many other accolades in recognition of his professional work. Especially coveted was the receipt by Harold of an honorary Doctor of Laws by the Senate of Dalhousie University in 1998.

### Maine Poultry Industry

In his personal notes, Harold records his impression on the rise and fall of the broiler industry in the State of Maine. Some of this is excerpted as follows. “There is a great story about Maine producing white broilers which, when dressed, do not have black pinfeathers. Donald P. Corbett (Corbett School of Business) was growing broilers in the late 1940s in an abandoned mill in the Waterville area. There was a farmer in Connecticut who had a chick hatchery by the name of Henry Saglio. This hatchery produced White Rock chicks which have white pinfeathers. Corbett went down to Connecticut in February and asked Saglio how many chicks he would hatch by July. Saglio said ‘about 150,000’ and Corbett replied ‘I will buy the entire production.’ That really was the start of broiler production in Maine and also the start of Arbor Acres Farms (Saglio) which became an international company.

The broiler industry in Maine became concentrated and were mostly family companies. The CMT company (Ft. Halifax Packing Co.) was owned by Corbett, McGowan and Turner. Penobscot Poultry was owned by Al Savitz. Hillcrest Poultry was owned by Bay Mendelson, Maplewood Poultry by Jimmie Mendelson (brother of Bay), and Lipman Poultry was owned by Frank, Harold and Barney Lipman. At the height of their productivity, these companies produced about $200 million for Maine agriculture annually and were second only to Delmarva in broiler production. They were very innovative and enterprising. As an example, Lipman Poultry used to ship frozen chicken hocks to Hong Kong for soup. They were young and daring, and became the first in everything. They were the first participants in USDA inspection program in 1959, setting a trend that others followed. They were the first to become completely integrated. They were the first to use branded products such as ‘Tip Top Broilers.’ Lipman Poultry and CMT Company produced the first PPLO-MG-free breeders by building a research house at the University of Maine where the work was accomplished.
Gradually over the years these private companies have disappeared. The Ft. Halifax Company was sold to the Ralston-Purina Company. The others just disintegrated into families. The reason the poultry industry left Maine was not due to the fact that the Delmarva poultrymen had more money, were smarter or better organized or had more research, but rather was due to the fact entirely that rail shipment cost of corn from Illinois to Maine was much more expensive than shipping by barge down the Mississippi to Tysons. Also, corn could be grown successfully in Delmarva and many other poultry states, but not in Maine. Also, Maine has always been a high tax state.” The period of greatest productivity for the Maine broiler industry was about 1950-1970, a period that closely coincided with the existence of the Department of Animal Pathology at the University of Maine (see above).

University of Maine Development
Being discouraged by University administration policies and the lack of recognition and support by the University, Harold was ready to make a career move. In his own words “by this time I was getting somewhat disillusioned, perhaps some of my own making, but I should say I have a short interest span anyway and I was ready to move.” Consequently, in 1968 he accepted a new position as Director of Development at the University of Maine, working directly for the President of the University. Harold enjoyed the work but much travel was required to see prospective donors all over the country, much of it on weekends. The chance to meet many interesting persons, mostly very wealthy, was one of the high points. However, the increasing bureaucracy and structure imposed by the University became a problem, and prompted yet another career change.

Chute Chemical Company, Inc.
Having had an entrepreneurial interest from childhood, and dabbling in a variety of investments and land speculations over time, it may have been only natural for Harold to seek to start his own business. This decision was helped along by discussions with Don Corbett in 1976 to start a chemical company. Corbett would own 80% but Harold would be president and run the company. Corbett’s 15 small poultry companies would purchase the chemicals, which would be principally egg detergents and plant cleaners. Taking a sabbatical leave from the University, Harold developed a business plan and officially formed the company in February 1977. Harold bought out Corbett after a few years and continued to manage an increasingly profitable chemical products company for 19 years. Marion (Harold’s wife) did the payroll and became an integral part of the business. By 1989, there was a line of 235 products for application in food processing, institutional, laundry and textile, dairy, vehicle-transportation, pulp-paper-printing, and specialty areas. This was an exciting and productive period. A staff of 10-15 persons was employed, including several chemists and engineers. The company was sold in 1995 so that Harold and Marion could commence their retirement together.

Civic and Business interests
Harold and Marion became naturalized U.S. citizens in October 1955, which set the stage for Harold to play an active role in civic affairs in the town of Orono. In Harold’s words,
“...I was pretty determined (about citizenship) thinking that if I was going to live in a country, I was going to be able to vote and do something about government.” He was elected as Selectman for the town of Orono in 1963 and continued for the next 10 years to serve on the Town Council, including a term as its first mayor.

Harold was a pillar in the Pine Tree State 4-H Foundation and served as its president in 1985. He was a director of several banks, Blue Cross Blue Shield of Maine, and Machigonne Insurance Company. His significant entrepreneurial interests are discussed earlier, but also include a life long pattern of investment in real estate and other activities too numerous to enumerate here. He was a member of Lions International, joining a Bangor club. However, it was his considerable involvement in Masonic work that provided structure to his civic and philanthropic work.

**Philanthropic activities**

Harold credits Frank Witter for teaching him the importance of giving back financially to the community and other charitable causes. Harold has generously supported a variety of charitable endeavors including the Page Farm and Home Museum and the Witter Agricultural Research and Teaching Center at the University of Maine, the Pine Tree 4-H Foundation, the Masonic Children’s Learning Center in Bangor, and the Nova Scotia Agricultural College. He has also supported Lions International and the Eastern Maine Technical College.

**Other interests blend into retirement**

Over the years, Harold has pursued a serious interest in stamp collecting, gardening, and camping. There were many family trips to the out-of-doors in early years. This author remembers a hike with Harold to the top of Mt. Katahdin in the early 1950s. A family “camp” located on Pushaw Pond, near Orono, remains a valued retreat for Harold, his children and grandchildren.

Harold became a Mason in 1951 and progressed rapidly, attaining the 33rd degree (Scottish Rites) in 1970. He served as Grand Master of the nearly 50,000 Masons in the State of Maine from 1969-70, the only foreign born person to hold that office through that time. He has remained active in Masonic work and has received many honors and distinctions. He was Potentate of the Anah Temple in 1981. He has used this venue to develop friendships and contribute to the greater good in Maine and the world. He continues to be active in Masonic charitable organizations.

Harold and Marion are members of the Church of Universal Fellowship, an interdenominational church in Orono, ME.

Another life long interest, which is partly hobby and partly simply a way of life, is the business of investing and making money. Harold still keeps a watchful eye on the stock market and will regale anybody with similar interests about his successes and failures, and the next great opportunity. He has always read aggressively in fields of his personal interest, particularly in economics and finance.
Harold and Marion continue, at this writing, to live in Orono in the house they built in 1971 on the banks of the Penobscot River where his extensive vegetable garden provided both food and enjoyment over the years.

**Looking back – achievements, learnings and reflections**

Some of the principles that drove Harold’s life, and quest for excellence in a variety of fields, are embodied in two commencement addresses delivered to students at the Nova Scotia Agricultural College in 1975 and 1998, both events commemorating his receipt of honorary degrees from this institution. He instructed students on the value of character, duty to country, service to society, leadership, excellence, charity and success. He invoked the old quote, “He has achieved success who has lived well, laughed often and loved much.” Harold is well described by the above and has truly lived a life for all seasons.

*Author’s explanation of sources: This biography was based on notes and chapters written by Harold about his life, and was supplemented by a personal interview with Harold in August 2006. Harold has reviewed the material as presented above. Comments were also received from Ken Eskelund.*

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*Biography solicited by the Committee on the History of Avian Medicine, American Association of Avian Pathologists.*

*Additional biographical materials may be available from the AAAP Historical Archives located at Iowa State University. Contact information is as follows:*

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