

Historical Article—

Avian Diseases: The Creation and Evolution of P. Philip Levine's Enduring Gift

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SUMMARY. This account has two aims. The first is to provide a tribute to Dr. Pincus Philip Levine, the founder of *Avian Diseases*. It addresses several facets of the life and times of this remarkable and interesting personality, giving some insight into the why and how he came to establish the journal. It touches on his background; his character; his astute and searching mind; his ability to interact with others; his influence on veterinary, and especially avian, medicine; and his teaching genius and reveals the positive force he was in his interactions with others. Then, it turns to a celebration of the first half-century of the journal that he created, essentially single-handedly, and reviews some of the history regarding the stimulus, birthing pains, and gradual evolution of the journal through a succession of editors, business managers, and supporting casts to the publication that we see today, nearly 50 yr later.

RESUMEN. *Artículo histórico-* Revista Avian Diseases (Enfermedades de las Aves): la creación y evolución del legado de P. Philip Levine.

Este artículo tiene dos objetivos. El primero es proporcionar un homenaje al Dr. Pincus Philip Levine, el fundador de la revista Avian Diseases (Enfermedades de las Aves). Este artículo abarca varios aspectos de la vida y tiempo de este personaje notable e interesante, y proporciona una idea de por qué y cómo él llegó a establecer la revista. Aborda a fondo su carácter; su mente astuta y de búsqueda, su capacidad de interactuar con los demás, su influencia en veterinaria; especialmente en medicina aviar y su genio educador revelan la fuerza positiva de sus interacciones con los demás. Posteriormente, el artículo se convierte en una celebración del primer medio siglo de la revista que él creó, prácticamente sin ayuda y revisa parte de la historia en relación con el estímulo, las dificultades de su creación y la evolución gradual de la revista a través de una sucesión de editores, de gerentes y de equipos de personas que han apoyado a la publicación actual, por casi 50 años.

Key words: Historical article, P. Philip Levine, creation of Avian Diseases journal, Arnold Rosenwald, Leland Grumbles, David Anderson, Louis van der Heide, Jagdev Sharma, Y. M. (Mo) Saif, Morris Cover, Charles Hall, Glenn Snoeyenbos, Robert Eckroade, Charles Hofacre, Lasher History Lecture presented at the 2006 AVMA meeting

Abbreviations: AAAP = American Association of Avian Pathologists; AVMA = American Veterinary Medical Association; NECAD = Northeastern Conference on Avian Diseases

Dr. Levine was born in 1907 in New York City. After receiving a B.S. degree from City College of New York in 1927, he entered the Veterinary College at Cornell where he received an M.S. and D.V.M. in 1932, and a Ph.D. 10 yr later, with interruptions for a year to teach school in New York City; and a couple of years before finishing his Ph.D., he worked for the New York State Conservation Department.

His entire career after 1937 was in the field of avian diseases and was spent totally at Cornell, aside from numerous consultancies, teaching assignments, and sabbatical leaves abroad.

He was a member of the Department of Pathology and Bacteriology in the Veterinary College. Because he showed interest in poultry diseases, a characteristic lacking in most of the faculty, he was assigned responsibility for anything avian. In this role, he oversaw the research and teaching programs, diagnostic services, and extension activities dealing with this field. Ultimately, in 1961, he was named the Chairman of the newly created Department of Avian Diseases in the college.

Primarily, he was a parasitologist, but he was a bacteriologist and a virologist as well. There were many "firsts" recorded in his >70 scientific papers that dealt with parasitic diseases, mycoplasmas, and a variety of viruses. His work on coccidiosis was especially important, establishing the value of sulfonamides for its control.

He had a superb ability to analyze and draw logical conclusions, displaying a cool head, and he had an extraordinary talent for sifting the wheat from the chaff. Many speakers at meetings benefitted from his searching questions, and sometimes embarrassing conclusions. But he always conducted these exchanges in a gentlemanly manner. His personal traits, aside from his high standards, included a large measure of decorum and respect for others. He mixed easily with high-level administrators and yet was very comfortable rubbing elbows with members of the poultry industry. In addition to being respectful of others, he commanded *and demanded* respect. Few people called him by his first name unless they were truly his peers.

The major aim of this review is a description of Dr. Levine's role in establishing *Avian Diseases*. Clearly, he had a deep appreciation of good science and the reporting of such. Editorial work was natural to him. He wrote exceptionally clear and concise reports, and his command of the English language was superb. Furthermore, he was well organized and cognizant of deadlines. This led him to involvement with a journal published by the New York State Veterinary College entitled *The Cornell Veterinarian*. He became Editor of the journal for a period of 5 yr and subsequently was on the editorial board. He, along with many of the others engaged in poultry disease research at Cornell, published frequently in the journal.

The idea of a journal that would be devoted exclusively to the subject of poultry diseases was not new. According to some historical

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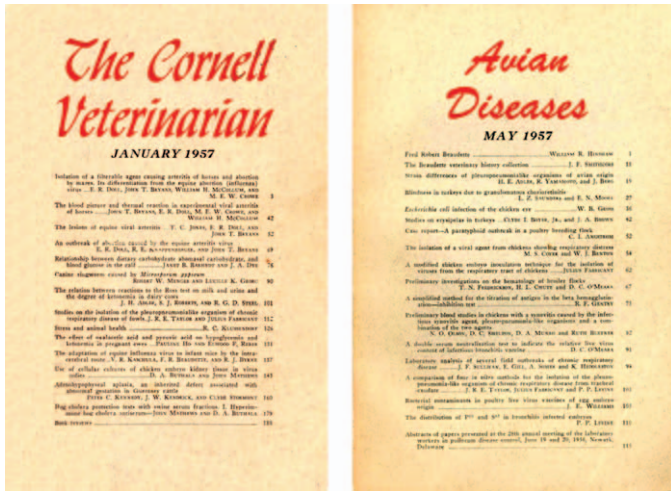


Fig. 1. The covers of *The Cornell Veterinarian* and *Avian Diseases* were almost identical.

notes from the archives established by the American Association of Avian Pathologists (AAAP), "... it is well known that P. P. Levine was dreaming, discussing, and planning such a publication during the late thirties and the early forties." Also, in the first issue of *Avian Diseases*, Dr. Levine noted that Drs. William Hinshaw and Frederick Beaudette had considered starting a journal of avian pathology, but plans were dropped coincident with the start of World War II. He further related that Dr. Beaudette was enthusiastic about his (Dr. Levine's) plans to start *Avian Diseases*, and he offered to serve on the editorial board and assist in any way he could.

In addition, according to an account published by Dr. Levine in 1960 (2), additional support for a quarterly journal came from a committee formed by the Northeastern Conference on Avian Diseases (NECAD). It seems that the proceedings of the annual NECAD meetings were used as reference material by many authors of scientific literature, and it became difficult to satisfy the many requests for copies by nonmembers and libraries. The committee believed that one issue of a quarterly journal could serve as the proceedings from the annual NECAD meeting and that the other three issues could be available for papers offered by scientists anywhere in the world. The solution came when Dr. Levine and Dr. John Whitlock, the business manager for *The Cornell Veterinarian*, proposed to the directors of that journal that they sponsor and publish a new quarterly to be entitled *Avian Diseases*. The proposal was accepted, and the journal was "born" with a promise by the "parent," of US\$400 in credit should it be needed. The covers of the two journals, aside from the titles, were virtually identical (Fig. 1), and the first three volumes of *Avian Diseases* were published by *The Cornell Veterinarian, Inc.*, in Ithaca using the same business manager (Dr. Guy Morse at that time) for both journals. A group of Associate Editors aided in the production of the journal: Drs. Dorsey Bruner (the Editor of *The Cornell Veterinarian*), Harold Chute (Maine), Robert Gentry (Pennsylvania), Morris Cover (Delaware), Erwin Jungherr (Connecticut), and Henry Van Roekel (Massachusetts). The latter five individuals, along with P. P. Levine, were the members of the NECAD committee noted above.

Assembling papers for the first issues was no mean task. Dr. Levine drew heavily on his own team. In addition to a tribute to Dr. Beaudette, whose illness and untimely death preceded the publication of the first issue, which came out in 1957, there were 14 research papers and one case report; and of these papers, six (40%) were from the Cornell team! Also, he had to wield a heavy



Fig. 2. Dr. Levine at the desk upon which *Avian Diseases* was "born."

hand editorially to get the first issues off the ground. The author of this account was a graduate student at the time, with a small laboratory adjacent to Dr. Levine's office. There was a connecting door (always open) between the two, and this provided an opportunity to see him at his desk (Fig. 2) cutting and pasting copy to show the printer just how he wanted the pages to look. To make sure that schedules were met, he admitted that he sometimes "helped" an author with a bit of "rewriting" rather than send a manuscript back for a time-consuming revision. It was truly a one-man operation! Thus, the journal was launched, at the grand cost to subscribers of US\$5.00/yr (US\$7.00 overseas).

After 3 yr, it was time for the journal to leave the cozy nest that *The Cornell Veterinarian* had provided. It was not entirely coincidental that the fledgling organization called the AAAP was on hand to take the reins. The need for a home for *Avian Diseases* was one of several stimuli for the formation of the AAAP because one objective was "to encourage the publication of a scientific journal on avian diseases." As noted by Leland Grumbles and Charles Hall in their 30-yr history of the AAAP (1), the histories of the AAAP and *Avian Diseases* were closely intertwined. They pointed out that, "It was fortunate for the AAAP that this journal was offered to the association. It was equally fortunate that the AAAP was available to take responsibility for the new journal." Indeed, the citation issued by the AAAP when they awarded life membership to Dr. Levine stated, "The fact that *Avian Diseases* needed sponsorship after gaining a strong foothold was one of the key motivating forces behind the creation of the AAAP."

The second issue of Volume 4 in 1960 was the first in which editorial changes were in place following the transfer of publication responsibilities to the AAAP. P. P. Levine remained editor and Arnold "Rosy" Rosenwald was named Assistant Editor. The policy of having several Associate Editors remained until August 1961, after which there was only a single Associate Editor (Grumbles from 1961

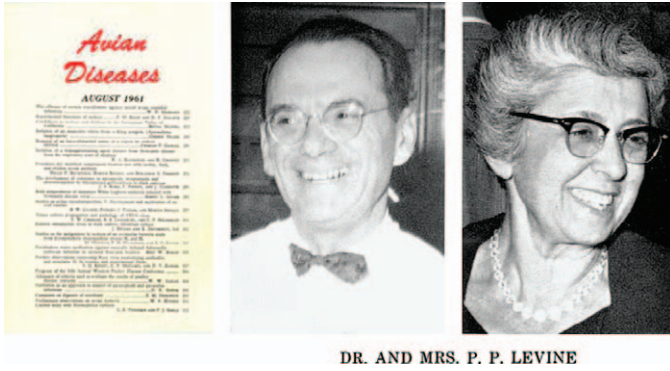


Fig. 3. The issue dedicated to Dr. and Mrs. Levine.

to 1966 and Gentry from 1968 to 1971). Handing over of the “business reins” occurred during the summer of 1960 when Dr. Cover, the Secretary-Treasurer of the AAAP, was appointed Business Manager. Thus, a new era for the journal had begun.

Several changes in structure and stewardship occurred soon after the transfer. In February 1961, Dr. Rosenwald assumed the editorship. Soon thereafter, Dr. Grumbles was named Associate Editor and the group formerly called Associate Editors became known as the Editorial Board. Recognizing Dr. Levine’s enormous contribution in establishing a successful journal, the AAAP dedicated the August, 1961 issue to him and to his wife, Selma, who encouraged and assisted him (Fig. 3). They further honored him by designating him Honorary Lifetime Editor.

Over the years, the journal has undergone a number of changes. Leland Grumbles assumed the editorship in 1967, with Robert Gentry as Associate Editor. Subsequently, David Anderson (in 1974), Louis van der Heide (in 1994), Jagdev Sharma (2004), and Y. M. (Mo) Saif (2013) became Editors. The position of Associate Editor was dropped in 1972. The practice of having the Secretary-Treasurer (now Executive Vice President) of the AAAP serve as Business Manager of *Avian Diseases* continues to the present. However, in 2008 the day-to-day business operation of the journal was turned over to a new AAAP business office in Jacksonville, FL, staffed by Bob and Janece Bevans-Kerr.

What can we say about the journal since the early years? How has it changed? What has it contributed and what are its particular strengths? What is its place in today’s scientific world? Perhaps we can take a look at some of the major shifts in a semichronological but brief manner to get a sense of just what Dr. Levine’s “gift” has meant to our chosen field of avian medicine. In all, there have now been seven editors (Fig. 4) and five business managers (Fig. 5) who have stewarded the journal.

THE ROSENWALD ERA (1961–66)

Rosy, located at the University of California, Davis, provided a few comments about his tenure as Editor. In his words, “it all started when I was in Ithaca on a sabbatical leave and Dr. Levine asked if I would, or could, do the job.” He said he would not have taken the job except for the promise of help from Kelvin Deming, a professional editor for the University of California, Davis, veterinary



Fig. 4. Editors of *Avian Diseases*.

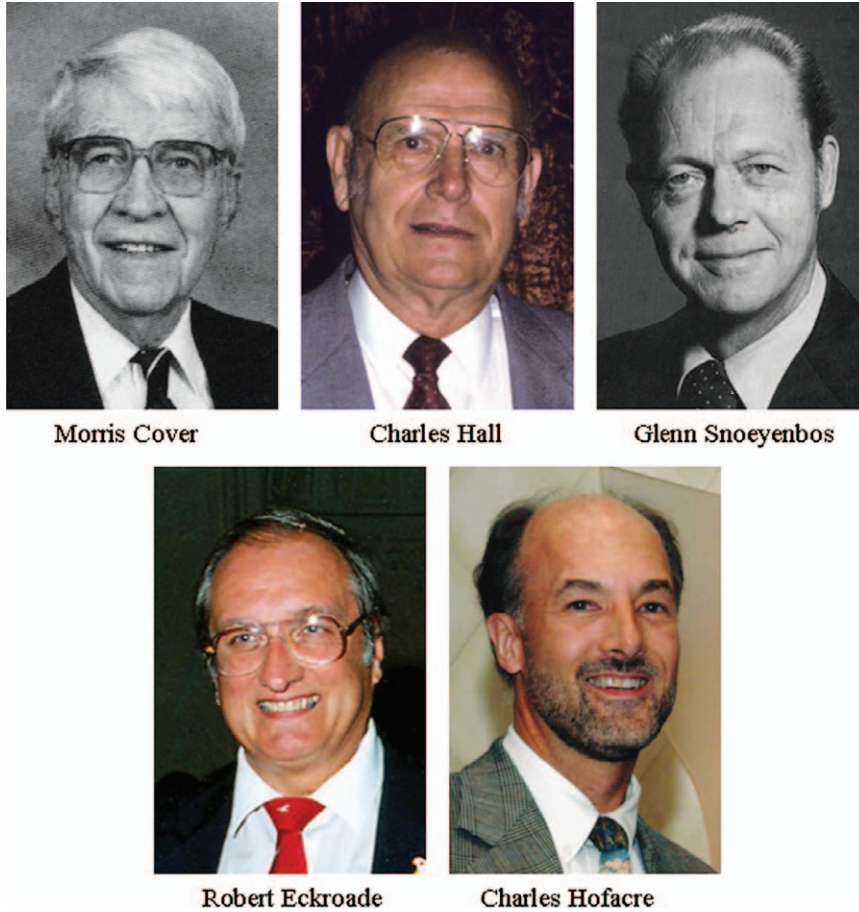


Fig. 5. Business managers of *Avian Diseases*.

group. Rosy also noted that P. P. Levine continued to be very helpful: “I would not have succeeded at all without P. P. Levine.”

THE GRUMBLES ERA (1967–73)

Leland Grumbles, at Texas A&M University in College Station, served as Editor from February 1967 through the end 1973. Few changes were made during that period. He commented that the arrangement he followed was that all papers went through both reviewers and Kelvin Deming before being sent to Ithaca for printing and mailing. Two “Special Issues” of *Avian Diseases* were published during Grumbles’ tenure. The first, “Neuroanatomy of the Domestic Fowl – *Gallus domesticus*,” published in 1969, consisted of a work started by Erwin Jungherr and polished up by Charles Helmboldt. It was a distinct issue, not part of Volume 13. The second, entitled “Control of Marek’s Disease,” was published as the first issue of Volume 16 in 1972. It consisted of the proceedings of a symposium on the control of Marek’s disease held during the American Veterinary Medical Association (AVMA) meeting in Michigan.

THE ANDERSON ERA (1974–93)

David Anderson, at the University of Georgia in Athens, held the editorial position for a full 20 yr, until the end of 1993. Shortly after he took over, Kelvin Deming died but Kelvin’s wife and daughter and, later, his daughter’s husband, continued to assist with the editing. Dave relied heavily on his editorial board, noting that “it took me a while to learn the reviewers – their capabilities, likes and dislikes, *i.e.*,

subject matter and/or colleagues.” One review he received, which he considered to be especially memorable, included the statement, “this manuscript is replete with inexactitudes.” The size of the journal changed from 6×9 to 7×10 inches in 1986. Unquestionably, the journal thrived under Dr. Anderson’s leadership.

A third Special Issue of *Avian Diseases*, the Proceedings of the Fifth International Symposium on Avian Influenza, was published during Dave Anderson’s tenure as Editor, but with special “Guest Editors” D. E. Swayne and D. L. Suarez.

THE VAN DER HEIDE ERA (1994–2003)

Louis van der Heide, at the University of Connecticut, Storrs, served for the period of 1994–2003, following much the same approach as his predecessors. The new era of electronic delivery and processing had not yet arrived for *Avian Diseases*, which meant that all manuscripts were received by mail and were then sent to two reviewers who would return their comments by mail within a few weeks. Publication was timely and most manuscripts were in print within 6 to 10 mo. Dr. van der Heide noted that there was an increase in international submissions during his tenure, making the journal more of a worldwide publication.

THE SHARMA ERA (2004–13)

Coincident with the appointment of Jagdev Sharma (University of Minnesota, Minneapolis) as Editor, the *modus operandi* and the face

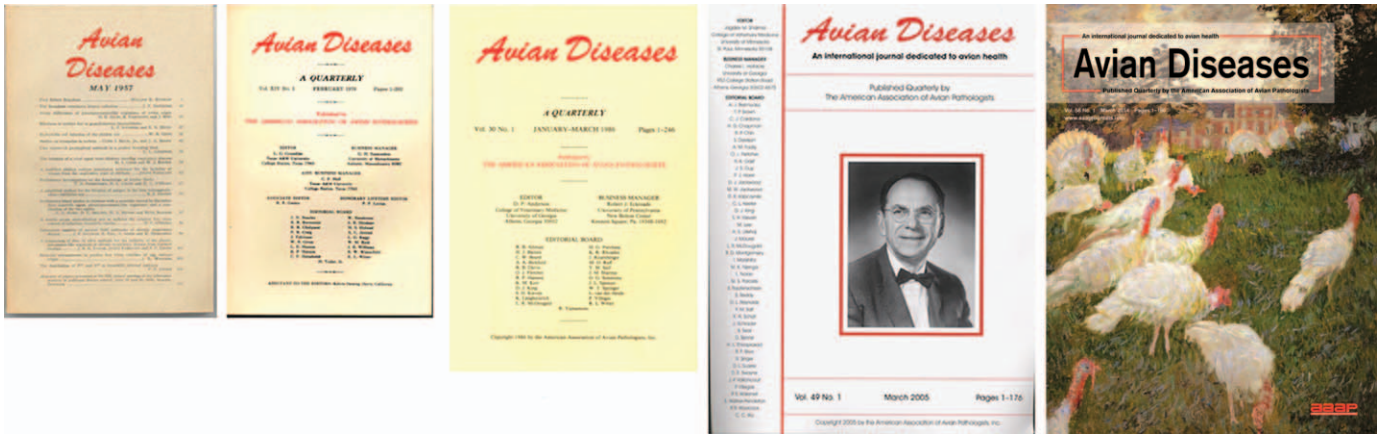


Fig. 6. The changing face of *Avian Diseases*.

of *Avian Diseases* changed drastically. An entirely new cover format and size were adopted. Thus, the first issue of Volume 49 had a glossy white cover graced with a photograph of P. P. Levine, the journal's founder (Fig. 6). Also, it carried the phrase "An international journal dedicated to avian health." The only feature kept from the old format was the red script lettering of the journal's title.

A very significant change was the switch to electronic submission and review to bring the journal into the modern world and help reduce the publication time for articles. Yet another bit of evolution was seen in the addition of an Advisory Board, international in makeup, appointed by the AAAP Board of Directors for 5-yr terms. One of their first tasks after Dr. Sharma took the reins at the end of 2004 was to develop a mission statement for the journal. This statement recognized the unique nature of the journal in that it serves both the scientific community and the industry. The new statement appeared inside the front cover of the journal and it emphasized that it is an international journal publishing both original basic research and clinical research with the ultimate mission of enhancing scientific knowledge and promoting avian health. The journal had a truly international flavor by the Sharma era that was reflected in the origin of papers. For example, a 2009 issue had a total of 27 papers and reports, of which 13 (48%) came from nine countries in Europe, South America, and Asia. Similarly, the Editorial Board (now numbering 47 individuals), was international in makeup. To help improve the "impact factor" of the journal, invited minireviews were included with some issues. According to *Science Watch*, Volume 16, 2005, *Avian Diseases* was the ninth most cited among 150 veterinary journals surveyed.

Clearly, there were many significant and important improvements to *Avian Diseases* that occurred during Dr. Sharma's tenure as editor.

THE SAIF ERA (2013–PRESENT)

Dr. Y. M. (Mo) Saif (The Ohio State University, Wooster) assumed the editorship in 2013, after having served as Editor-in-Chief for the 11th and 12th editions of the major reference text *Diseases of Poultry*, another publication for which the AAAP has editorial responsibility.

Several changes have recently been instituted, including the following:

- A revised mission statement indicating that the journal "will not consider manuscripts dealing with wild birds unless they have relevance to poultry health."

- Critical reviews dealing with contemporary poultry health issues. These reviews are being planned for each issue of the journal. Relevant AAAP committees have been asked to take leadership in providing the reviews.
- An exchange of Table of Contents with the journal of Avian Pathology.
- A Letter to the Editor column. Letters to the Editor related to the scientific content of the journal will be included in the journal along with rebuttal letters.
- The cover of the journal has been redesigned using more of the cover space for portraits of distinguished poultry health professionals and poultry art.

SUPPORT FOR PUBLICATION

The cost of a subscription is currently US\$335/yr, 67 times its original price. In the mid-1960s, expenses began to threaten the journal, and it was ultimately agreed to increase subscription prices and, very significantly, to solicit help in the form of "sponsors," i.e., companies who directly financed the publication of a number of papers. Currently, the funding of the journal relies on subscriptions (25%), royalties (19%), membership dues (19%), page charges (18%), supplements (13%), advertising (4%), individual articles (JSTOR) (1%), and copyright clearance (0.01%). This is a far cry from the original underwriting provided by *The Cornell Veterinarian*.

THE P. P. LEVINE AWARD

Dr. Levine, in keeping with his desire to provide a strong forum for the dissemination of information on avian diseases, suggested that the journal promote excellence in manuscripts by making an annual award for the most outstanding paper published during the year. The AAAP Board of Directors concurred and, in 1964, an award of US\$100 was made to Walter Hughes for his paper on the development of a leukosis-free flock of chickens. The award was later named in honor of Dr. Levine, and the monetary reward was subsequently raised to US\$1000.

SUMMARY

This review offers a sense of the origin, the evolution through adaptation, and the fundamental changes in our journal that

reflected the needs of our profession. Had it not been for Dr. Levine's foresight, canny instincts, superior scientific credentials, editorial acumen, and a large measure of hard work, the journal might not have gotten off the ground. Furthermore, had it not been for the support of many colleagues, and especially the timely adoption of the journal by the fledgling AAAP, it might not have survived. Its success is the direct result of the support of contributing scientists from all over the world, the dedication and hard work by the editors, their assistants and reviewers, and acceptance of the journal as a significant publication by the entire scientific community. It should be abundantly clear that Dr. Levine's dream was brilliant and that the journal remains highly viable as a result of timely evolutionary changes.

REFERENCES

1. Grumbles, L. C., and C. F. Hall. The history of avian medicine in the United States. VIII. The American Association of Avian Pathologists. A thirty-year history. *Avian Dis.* 32:175–194. 1988.
2. Levine, P. P. Avian Diseases. Official organ of American Association of Avian Pathologists, Inc. *Avian Dis.* 4:97–99. 1960.

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