OBSERVATIONS ON VETERINARY RESEARCH IN THE AREA OF AVIAN MEDICINE IN THE UNITED STATES OVER THE TEN YEAR PERIOD 1968-1977

Research directed toward control of economically important diseases of flocks and herds becomes increasingly important as we move from individual animal treatment toward disease prevention on the flock or herd basis, and as our clients become corporate producers of meat, milk, and eggs rather than individual farmers.

In the area of avian medicine, veterinary research has elucidated basic etiologies and developed effective means of control for such devastating poultry diseases as pullorum, coccidiosis, the air-sac-disease complex, and Marek's disease. Modern poultry production could not exist as we know it without control of these diseases. Other disease problems of poultry remain to be solved. Research constitutes the major contribution of veterinary medicine to the poultry industry. Therefore, leadership in avian disease research should be assumed by those states which benefit most directly from the poultry industry, especially by those states which have colleges of veterinary medicine. This paper attempts to explore the extent to which this responsibility has been assumed.

Research productivity is difficult to quantitate. The enumeration of research reports and publications does not provide an infallible scale by which research can be measured. However, observations of research reports on a given subject over a long period of time do provide an indication of types and intensity of research activity and interest. Since numbers of research reports are, at best, only a rough measure of research activity, one meeting was selected for comparison. The avian medicine section of the annual meeting of the American Veterinary Medical Association is by far the largest meeting of the year dealing with avian disease research. Contributions to scientific knowledge in the field of avian medicine as evidenced by numbers of papers presented at this meeting from the 50 states and the District of Columbia during the 10-year period 1968 to 1977 are enumerated in Tables 1 through 5.

Certain statements seem justified by the data presented:

- 1. There are now 8 veterinary schools located in the top 10 poultry producing states. Strong research programs in avian medicine do not automatically develop, however, in veterinary schools in states where poultry is an important segment of animal agriculture.
- Two states which have veterinary schools, and rank in the top 20 in farm income from poultry have reported no avian disease research at the AVMA annual meeting during the past 10 years.

- 3. Five of the top 10 states in farm income from poultry offered an average of less than one paper per year dealing with avian disease research.
- 4. The two veterinary schools which currently maintain departments of avian medicine (University of Georgia and Cornell University) provided 29 percent of the poultry disease research papers presented between 1968 and 1977. Both of these institutions have a history of uninterrupted research productivity which spans several changes of deans, department heads and educational philosophy.
- 5. It is possible for a strong avian medical research program to develop in a veterinary school without the formation of an Avian Medicine Department. Minnesota serves as an example of this. The success of the Minnesota program may be attributable to the leadership and effort of certain individuals within that institution.

The odds against the development of a strong avian medical program in the absence of administrative encouragement and organizational structure seem high since outstanding programs have failed to develop in any of the 18 other veterinary schools which do not have separate departments of avian medicine.

- 6. The influence of large federal and commercial laboratories on avian disease research in some states is significant. This influence is illustrated in Table 4.
- 7. This information is offered in the hope that it will be of value to those who wish to encourage the development of avian medical research programs in institutions where such programs do not now exist, and to those who wish to encourage and enhance the several fine avian medical programs now providing veterinary service to the poultry industry and serving as a teaching resource for students.

SOURCE OF INFORMATION

- 1. Published programs of the annual meetings of the American Veterinary Medical Association.
- 2. Information on farm income from poultry by state was provided by the Agricultural Extension Service, USDA.

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