The Wildlife Biologist in Public Health: Functions and Responsibilities at State Level

WM. J. BIGLER and JAMES B. NICHOLS

*Florida State Division of Health, Jacksonville, Florida*

Veterinary programs have become well established in many state health departments during the past two or three decades. During this period we have seen brucellosis and tuberculosis in domestic livestock controlled to the point where they are no longer a great threat to public health. Rabies in domestic animals likewise no longer threatens human health as it did 30 years ago. While diseases of domestic animals transmissible to man are still of great importance and their surveillance continues to occupy much of the public health veterinarian's time, he is aware that many diseases have a wide host range. When considering the eradication or control of domestic animal diseases communicable to man the possibility of the causative agents occurring in wildlife must not be overlooked. This is one aspect of disease transmission which if ignored may jeopardize an entire control program. Surveillance and control of such diseases requires an understanding of the many etiologic agents and a thorough knowledge of wild animal activities and population dynamics as related to disease transmission patterns.

Even though a few state health agencies have employed wildlife biologists for the application of ecological survey methods in the research, surveillance and control of selected zoonoses, most states have not found a way to incorporate the services of field biologists in their public health organizational structure. Still, the wildlife disease research conducted by other agencies and institutions continues to emphasize the need to approach health from a broader ecological viewpoint. The public is demanding that state and local governments show leadership in solving the problems and rectifying the conditions which affect the quality of the environment. If state health programs fail to provide some form of surveillance and control of diseases of wildlife transmissible to man, it is doubtful that anyone else is going to assume complete responsibility in this area. Wildlife diseases affecting human health should be an important consideration of every state veterinary public health program.

Recruiting a biologist with academic training in the ecology of diseases and one inclined toward public health is often difficult. Field biologists are academically prepared to conduct habitat surveys, estimate populations and collect and identify different types of wildlife but are not usually specifically trained on epidemiologic investigation procedures. The challenge of zoonoses research has fortunately, however, prompted more wildlife biologists and vertebrate ecologists to pursue advanced training with major emphasis in related fields such as bacteriology, virology, mycology and epizootiology.

The duties and responsibilities of the wildlife biologist assigned to a newly established public health position must be delineated as the particular program develops. After an initial period of orientation and extensive training under direction of an experienced health program staff, the biologist should be able to function effectively as a professional without tight supervision.