

October 2011 **Article Number 5COM2**

Return to Current Issue

Herd-Health Programs for Limited-Resource Farmers: Prevention Versus Treatment

Renita W. Marshall

Assistant Professor Southern University Agricultural Research and Extension Center Baton Rouge, Louisiana renita marshall@suagcenter.com

Abstract: In recognition of the changing influences on animal health, Extension professionals are charged with the responsibility of delivering educational programs to our limited resources farmers on the importance of herd health. Herd-health programs must be designed and implemented with the help of an Extension veterinarian to provide routine, planned procedures that will prevent or minimize on farm diseases. There is a necessity for Extension professionals to get involved in educating our small farmers on the importance of animal health to enable them to maximize opportunities to participate in new markets for agriculture products.

Introduction

One of the primary concerns of the nation is agriculture's contribution to gross domestic product. A large percent of the U.S. population depends on the agriculture and forestry sector for their livelihood. Raising livestock is a particularly important activity for limited-resource farmers and stakeholders. Livestock is a means of accumulating capital and acts as a social safety net. Because animal or herd-health information is of potential importance not only to the farm business but potentially also to animal welfare and public health, understanding the types of sources of animal/herd health that farmers can utilize is important (Jensen, English, & Menard, 2009). Safeguarding animal health is of paramount importance to the U.S. economy, public health, and food supply. To ensure the continued productivity of livestock, there is a national need to educate farmers, including women and ethnic minorities, on livestock best-management practices. In addition, there is a need to build concurrent capacity in Extension in ethnic minorities' livestock-raising issues.

Limited-resource farmers need one-on-one contact. Small farm operations are operated by individuals with different knowledge bases. Understanding the profile characteristics of the minority farmers who need and participate in our Extension programs is important for those concerned with the process of planning Extension programs for our stakeholders. Extension program planning should be approached primarily from the point of the small farmers we serve, and secondarily from a subject matter point of view (Martin, 1988).

What Is Herd Health, and Why Is It Necessary?

One such definition is that herd health is a planned animal-health and production-management program that uses a combination of regularly scheduled veterinary activities and good herd management designed to

optimize animal health and productivity (Blood, 1979.) In any livestock production system, certain diseases and production constraints can be anticipated on the basis of accumulated experiences. Herd-health management and preventive medicine programs are designed to minimize potential adverse effects of these predictable constraints and to protect against unexpected ones. Principles of these programs may include pregnancy diagnosis, bull breeding soundness evaluations, consulting on vaccination and treatment programs, becoming involved in biosecurity and food safety issues, and it may also involve organizing and reviewing a recordkeeping system (Campbell & Jelenski, 2006).

Diseases affecting livestock can have a significant impact on animal productivity and production; on trade in live animals, meat, and other animal products; and on human health zoonosis, and, consequently, on the overall process of economic development. Prevention of diseases in beef herds is essential for being profitable. Waiting until signs of a disease appear to institute a herd-health program is too late. Once most diseases are finally apparent, they have been seething in the herd for months and have been reducing herd profits. Unfortunately, many of these diseases have no treatment, so prevention is critical. Disease surveillance will help determine the most important diseases of a farm operation and will present clinical approaches that can improve detection, diagnosis, and treatment of herd-based problems.

There are a number of animal diseases of concern that affect the adequacy of the food supply for a growing world population and have a huge implication for global trade and commerce, such as Exotic Newcastle Disease, Foot and Mouth Disease, West Nile Virus, and Bovine Spongiform Encephalopathy. The outbreak of Foot and Mouth Disease in the United Kingdom in early 2001 caused many producers to re-evaluate their own herd-health programs.

The Extension Veterinarian

The Extension veterinarian develops education programs to transmit information from the veterinary faculty and other sources to county Extension agents, veterinary practitioners, industry, livestock producers, and the public. Extension veterinarians can be of tremendous help in establishing and maintaining animal health programs. Herd-health veterinarians need to be involved in the entire process, including prevention, detection, and diagnosis of disease.

There is no single program for all herds. Some producers may expect a complete program to include reproductive examinations, vaccination and therapeutic procedures, and nutritional and selection consultation. Others may request a less sophisticated program. In any case, the consulting veterinarian should have a basic plan that is flexible enough to be applicable for any herd. The study conducted by Jensen et al. in 2009 concluded that farmers with lower farm incomes are as likely as those with higher farm incomes to use veterinary sources, Extension, or the Internet. However, farmers with lower farm income tended to be less likely to use livestock magazines/media and animal health product company sources. Also, these farmers are less likely to use multiple sources of information. The results from the study suggest that Extension may be a more important source for farmers in more rural areas.

What Needs to Be Done?

Farm projects, including herd-health plans, for limited-resource farmers should start at the grassroots level. Extension project should provide services directly to the limited-resource farmers. Extension professionals need to be aware of the type of livestock and enterprises that these farmers are mostly involved with. The main service small farmers depend on is the information they receive from one-on-one contact with Extension and Extension professionals. This will be done through an aggressive outreach initiative that engages Extension, land-grant universities, and the national government.

The 2501 Program administered by the USDA's National Institute of Food and Agriculture (NIFA) was implemented to allow those limited-resource minority grant recipients to use the funds to establish small farm projects or to support their existing small farm projects. Once these projects and sites are started they become future sites for producer training. Furthermore, cooperators and participants become spokespersons for the programs.

Conclusions

Veterinary medical Extension education is an important part of Extension programming. Needed education and change provide a constant challenge to Extension agents and veterinarians. A good relationship is needed among university Extension, practicing veterinarians, county Extension agents, and clientele (Meyerholz, 1974). In order for herd-health programs to be developed and be effective, there needs to be a close relationship between the producers and their Extension veterinarian.

The USDA, state animal health agencies, the American Veterinary Medical Association, and colleges and schools of veterinary medicine and departments of animal science should develop a national animal-health education plan focusing on education and training of individuals from all sectors involved in disease prevention and early detection through day to-day oversight of animals. It is widely agreed that prevent ion rather than treatment is the most economical approach to keeping disease losses low. Treatment of a disease after its onset is not always effective and is often costly. Production losses often occur before diagnosis and treatment can be instituted. Livestock are important in supporting the livelihoods of limited-resource farmers, consumers, traders, and laborers throughout the developing world.

References

Blood, D. C. (1979). The veterinarian in planned health and production. Can. Vet. J, 20:341-347.

Campbell, J. R., & Murray, J. (2006). Herd health in cow/calf operations in North America. World Buiatrics Congress. Retrieved from: http://www.ivis.org/proceedings/wbc/wbc2006/campbell.pdf?LA=1

Jensen, K. I., English, B. C., & Menard, R. J. (2009). Livestock farmers' use of animal or herd health information sources. *Journal of Extension*, [Online], 47(1) Article Number 1FEA7. Available at: http://www.joe.org/joe/2009february/a7.php

Martin, R. A. (1988). Factors associated with participation of Iowa young farmers in agricultural Extension programs. *Journal of Agricultural Education*. 29(1).

Meyerholz, G. W. (1974). Extension and the practicing veterinarian. *Journal of Extension*, [Online], 12(3). Available at: http://www.joe.org/joe/1974fall/1974-3-a5.pdf

<u>Copyright</u> © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the <u>Journal Editorial Office</u>, <u>joe-ed@joe.org</u>.

If you have difficulties viewing or printing this page, please contact <u>JOE Technical Support</u>.