**Early Detection/Rapid Response to Foreign Animal and Zoonotic Diseases Through a County Animal Security and Health Network**

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**Project Scope:** The 2003 Exotic Newcastle Disease outbreak flourished for nearly six months in backyard flocks before diagnosis and detection occurred resulting in the depopulation of over 3 million birds. Early detection and reporting by underserved non-commercial livestock and poultry owners (NLPO) could significantly have mitigated the economic loss and damage to individuals and California's agricultural infrastructure. In order to prevent similar future incidents, effective means of reaching NLPO with crucial veterinary information must be established. A 2006 National Center for Foreign Animal and Zoonotic Disease Defense (FAZD Center) needs assessment identified feed retail managers as the most common means to communicate animal health and nutrition topics with NLPO communities. The FAZD Center developed a network concept that would utilize feed retailers to disseminate crucial information from the state veterinarian to NLPO through the state's existing Cooperative Extension system. Minority serving land-grant institution (MSI) (1890 and 1994) Cooperative Extension Programs with existing outreach capacity for underserved audiences were selected in 6 states (AR, KY, MT, NC, TN, and TX) to lead a the network's pilot test in 12 counties in each state.

**Recent Progress:** The FAZD Center engaged state veterinarians to initiate a series of 3 alert scenarios to the network of feed retailers assembled by county Extension educators. MSI Cooperative Extension Programs created collaborative partnerships with 1862 and 1994 land-grant institutions to engage county participation. County Extension educators collected feed retailer demographics estimating overall potential of CASHN for reaching NLPO in a timely manner. Data collected included: average number of weekly customers, number of non-commercial customers, percentage of customers buying feed for various species, and feed retail managers' normal means of gaining and verifying animal-related disease information. Network speed and efficiency data were collected for two replications of the alert system.

**Future Plans:** The next step of CASHN will be expansion to state-wide networks in the pilot test states and adoption of CASHN in other states. The goal will be a national network of fostered relationships with feed retail managers by county-based Cooperative Extension educators across all 3066 U.S. counties

**Relevance to Listed Research Areas:** The communications network would provide DHS, USDA, and state animal health authorities' access to an established Cooperative Extension communications infrastructure reaching NLPO for prevention, early detection, early reporting, and recovery--significantly mitigating the risk and impact of catastrophic foreign animal and zoonotic diseases through disease education and timely alerts.

**Publications:** Vestal, T. A. and Degenhart, S. H. (2008). A county animal security and health network (CASHN) for early detection/rapid response to foreign and zoonotic animal diseases. http://fazd.tamu.edu/publications/white-papers/