

FIVE-YEAR PLAN
October 10, 2001

Division: Animal Industry

Branches: Livestock Disease Control & Veterinary Laboratory

Program Objective: To assist in the development of livestock and poultry industries through pest and disease detection, control and prevention.

Deptl Obj: To facilitate the growth of existing and new agricultural products & by-products for local & export sales.

Program Goal 1. To facilitate growth of market cattle, market hog and egg farm value at an average rate of two percent per year for cattle and one percent per year for hogs and eggs for calendar years 2002 through 2006.

The Hawaii livestock and poultry industries, which include primarily small to medium size business enterprises, are important to Hawaii's economy. The total on-farm value of cattle, hog and egg sales was \$34.3 million (cattle \$19,204,000; hogs \$4,425,000; eggs \$10,636,000) for CY 2000, an increase of 4.9% compared to CY 1999 (cattle \$16,806,000; hogs \$5,072,000; eggs \$10,803,000). Cattle, eggs and hogs ranked 7, 9 and 18, respectively in the top twenty Hawaii agricultural commodities for CY 2000. Eggs dropped one place and hogs two places relative to the 1999 commodities rankings. The department's Quality Assurance Division provides assistance to the milk industry (farm value \$28,102,000 for 2000). Considering milk, the total farm value for all livestock and poultry products exceeded \$62,000,000 for 2000. Only pineapple and sugarcane had a higher value of production.

For many cattle producers, the main source of income from cow-calf operations is the sale of weaned calves, grass finished steers and heifers, and spent cows and bulls. The number and weight of cattle sold, and the price per unit-weight received determine income. Individual producers have no control over market price fluctuations. In 1995 and 1996, prices received for weaned calves were at the lowest point for the current market cycle but the trend in beef prices has been upward since then. The farm price for Hawaii cattle and calves increased by 9.3% in 2000 to \$48.20 per hundred pounds live weight from \$44.10 per hundred pounds live weight in 1999. Price increases were primarily the result of increases in weaned calf prices received by producers.

During 2000, the total Hawaii inventory of cattle and calves declined by 9% from 1999 levels. Continued dry conditions in most major grazing areas kept available forage supplies low forcing cattlemen to reduce herd size. This is a continuing trend since 1997. As a result of reduced inventories, total cattle and calf marketing decreased by 1,000 head (-1.3%) from 1999. However, increased farm price offset reduced sales. On a national level, cattle inventory declined one percent. The Hawaii 2000 calf crop is estimated to be 4,000 below a year ago and this decrease may be reflected in future marketing.

During 2000, hog inventory declined by 2,000 head (-7%) from 1999. Fewer hogs were a result of losses attributed to chronic infection of some herds with porcine reproductive and respiratory virus and loss of market share to mainland produced pork. On a national level, hog production increased one percent. For market hogs, the persistence of nationwide low prices have affected the industry adversely over recent years and are responsible for a significant number of US swine producers quitting business. Although hog prices have increased over the last several years, Hawaii farm prices decreased from \$80.50 to \$79.30 (-1.5%) per hundred pounds live weight for 2000 compared with 1999. Market hogs in Hawaii are either locally produced or imported into the state for immediate slaughter. Locally produced pork represents an important “ethnic” commodity.

Hawaii egg producers are in direct competition with US producers for Hawaii markets. A major determinant for the price obtained by the producer for local eggs is the cost of imported eggs purchased by major supermarkets. Although egg production decreased from 149 to 143 million eggs (-4%) from 1999 to 2000, farm value for eggs dropped only 1.5% compared to 1999. Decreased egg production was a result of fewer layers on hand (-2%) and a decrease in the average percent lay-rate from 67.3% to 61.3%. The reduction in the number of eggs produced per hen mostly was a result of hot dry climatic conditions creating additional stress and an unfavorable laying environment.

Achieving the goal of increased production requires the consideration of many variables, few of which can be significantly influenced by the division. Expansion is primarily market driven. For market cattle, impediments to expansion include: lack of inexpensive land to support additional cattle; recent adverse climatic conditions; perceived adverse impact of cattle on the environment and endangered species; feed availability and cost; water availability for grazing animals; competition from US producers importing finished product into the state; and export transportation issues including high cost and extended transit times. The ongoing statewide drought continues to have a significant adverse impact on the Hawaii beef cattle industry. For market hogs, nationwide oversupply and depressed prices have been a serious obstacle for expansion. An additional problem for the swine industry is adoption of stringent animal Federal EPA waste disposal requirements that have the potential for putting some producers out of business.

The most critical task for the division is to establish and maintain disease-free statuses for current and emerging diseases of economic and public health importance. In order to successfully establish export markets, a country or region must demonstrate, in a scientific manner, that diseases specified by the importing country are absent in animals to be shipped. Rigorous disease surveillance for cattle and swine brucellosis, bovine tuberculosis and swine pseudorabies are essential ongoing State-Federal cooperative programs. However, depending on the importing country, surveillance information for other designated infectious diseases is required. Canada, a significant Hawaii export destination, requires that export cattle be free of bluetongue virus and anaplasmosis while Japan, a potential new export market, requires cattle be free of bluetongue virus, anaplasmosis, *Leptospira pomona* and Johne’s disease. Extensive testing requirements

to move feeder cattle into foreign markets can make any such venture economically impractical.

The division, along with the US Department of Agriculture, is able to assist the producer by maintaining infectious disease surveillance data and utilizing such data to negotiate import requirements with foreign countries. Recently, negotiations with Canada resulted in relaxing of import requirements for Hawaii cattle. The division also supports industry initiatives involving transportation options such as the movement of livestock on foreign carriers. In this regard, an agreement with Mexico and the US Department of Agriculture to move Hawaii cattle into the US through Mexico was completed during 2000 and will improve cattle handling during transit and reduce ocean transit times. It is yet to be determined if movement of Hawaii cattle into the U.S. via Mexico is an economically viable alternative to direct shipments to U.S. ports or to Canada.

Once import requirements are identified, the task of the veterinary laboratory is to institute required testing procedures according to national standards. During 2000, the veterinary laboratory was certified to perform diagnostic testing for porcine reproductive and respiratory syndrome and bovine paratuberculosis (Johne's disease). Testing procedures available through the veterinary laboratory provide timely and inexpensive export testing for industry and increase the feasibility of entering new export markets. Other ongoing tasks include gaining additional laboratory certification for export testing procedures; initiating surveillance techniques for re-emerging or newly emerging diseases of herd health and economic importance, such as Johne's disease for cattle and scrapie for sheep and goats; assisting with flock or herd health programs and on-farm quality assurance plans, such as the Hawaii Egg Quality Assurance Plan; and assuring that herd certification and assurance plans meet national standards in order to achieve industry goals.

The performance measures used to assess the progress toward the Goal are the farm values for market cattle, market hogs and eggs. Expected yearly farm value data is compared to the 2000 values of: (1) \$19,204,000 for market cattle; (2) \$4,425,000 for market hogs; and (3) \$10,636,000 for eggs. Total value for all three commodities for 1999 was \$32,681,000. The expected value for 2000 was \$33,250,000 while the actual reported value was \$34,265,000 (+4.8%). The expected total farm value for 2001 is \$34,799,000.

Financial and production data is from the Hawaii Agricultural Statistics Service.

Current Five-Year Plan

Identify Target/Task	2002	2003	2004	2005	2006
1. Market cattle value (millions)	20.0	20.4	20.7	21.1	21.5
2. Market hog value (millions)	4.51	4.56	4.60	4.65	4.69
3. Egg farm value (millions)	10.6	11.0	11.1	11.2	11.3
4. Response Plan for a highly contagious animal disease	X				
5. Ship cattle to Canada	X	X	X	X	X
6. West Nile virus assessment	X				
7. Develop Johne's education plan	X				
8. Conduct surveillance for Johne's disease	X	X	X	X	X
9. Conduct surveillance for scrapie		X			
10. Conduct surveillance for wildlife tuberculosis	X	X	X	X	X
11. Implement wildlife Tb management plan	X				
12. Continue Federal cooperative programs for brucellosis, pseudorabies and tuberculosis	X	X	X	X	X
13. Implement cervid Tb Plan	X				
14. Attain Tb free status for cervids				X	
15. Continue surveillance for anaplasmosis and bluetongue	X	X	X	X	X
16. Initiate new laboratory test procedure(s)	X		X	X	X
17. National Farm/Animal Id system in place in Hawaii				X	
19. Chapter 19, HAR, amended	X				

X - Projected Year for Completion