Head at the University of Nevada at Reno. As Dean, Dr. Thawley had a strong commitment to outreach at the College and saw the Leman Conference as a great opportunity to help the swine industry. He encouraged faculty in their efforts to build a quality program each year and provided the staff to support a conference of this size. He will be remembered for his commitment to the growth and success of the Allen D. Leman Swine Conference.

Regardless of all the efforts previously mentioned, you the individuals who attend the Leman Conference, are the most important reason for success. Without your presence, there would be no need for this meeting. Your commitment to your education brings you here. You have challenged yourself and others to be better. We want to meet that challenge.

Thank you for attending the 1998 Allen D. Leman Swine Conference. Please feel free to suggest ideas to improve future conferences.

— Charles H. Casey, DVM

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USDA marketing assistance programs—from Certified Angus Beef to ISO 9000

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History of grading services

The first tentative USDA standards for grades of beef, which were based on trading terminology in use at the time, were issued in 1916. The purpose of those standards was to provide a common language that would be understood in livestock markets throughout the country. These standards were initially used for market news reporting in 1917, for purchases of beef for the armies in World War One, and by steamship lines starting in 1923. The beef standards were promulgated as official U.S. Standards on June 3, 1926. Grading and stamping of beef carcasses, at the request of beef producers, started in June 1927. From the beginning, all grading services have been provided on a voluntary, fee-for-service basis, with no tax dollars used to support the programs (inspection for safety and wholesomeness is, however, a mandatory, tax supported program conducted by the Food Safety and Inspection Service (FSIS)). USDA grading was initially opposed by meat packers, who developed their own grading systems that they applied to their products. Growth of the USDA grading service—with the exception of periods of mandatory grading during WWII and the Korean War—was slow. However, from 60 million pounds of beef graded in 1930 (1.2% of federally inspected steer and heifer slaughter) the volume has grown to 20 billion pounds in 1996 (95.5% of federally inspected steer and heifer slaughter).

Through the years additional standards have been developed for livestock and meats. Veal and calf standards in 1928, lamb and mutton standards in 1931, and pork carcass standards in 1931 were added. Each of these standards has been revised a number of times through the years to reflect changes in production practices and consumer preferences for the products. Other services have been added to assist in the marketing of livestock and meat products. In addition to traditional grading and market reporting services, services provided by the Meat Grading and Certification Branch include:

- certification of products for delivery to meet specification and contract requirements; and
- quality system registration and auditing.

These last two programs will be discussed in detail.

Certification programs

Certification services were originally offered as a method for buyers of meat products to have third-party assurance that the products they receive meet the requirements of their contract with the seller. In most cases this involves a written specification that references specific requirements. Originally, product certification meant that a grader examined each cut to assure that it complied with the requirements, in much the same manner that each carcass is examined to determine the grade. In the 1970s, this changed to primarily a statistical sampling process, significantly reducing the cost of providing the service without losing assurance of product quality.

In 1978, the American Angus Association (AAA) came to the Standardization Branch (SB) with a request for a new marketing program for beef from Angus cattle. AAA and SB jointly developed a new type of certification program called “Certified Angus Beef (CAB).” In the CAB program carcasses of cattle with Angus characteristics are identified by trained packing plant employees under USDA supervision at the time of slaughter. After chilling and grading, the carcasses are examined for quality and yield characteristics which exceed the minimum requirements for the USDA Choice grade. These requirements are included in the CAB specification (Schedule 'G1). Carcasses which meet the requirements of the program are marketed as Certified Angus Beef, a premium quality beef product. Key among CAB's carcass requirements are (1) limiting the maturity (age) allowed to young cattle and (2) requiring a Modest amount of marbling (Average Choice). The success of CAB is demonstrated in a number of ways:

- volume marketed has grown from under 500,000 pounds in 1979 to 330 million pounds in 1997;
- Angus cattle registrations have grown from about 130,000 annually in the early 1980s to 220,000 in 1997;
Herbert C. Abraham

- premiums for black cattle are common throughout the cattle marketing chain; and
- many other programs have tried to emulate the success of the CAB program.

Today there are 10 other Angus programs certified by AMS graders and a number of others that carry Angus labels without certification. In addition, there is a Certified Hereford Beef program, four non-breed specific premium beef programs, a Certified American Lamb program, and a pork carcass certification program we administer.

What is the secret of the success of the CAB program? Marketing is very important, but without a quality product and customer confidence in the integrity of that quality not much would have been accomplished. From the beginning, CAB set a high level of quality as the requirement and, even when only a small portion of the carcasses qualified, never wavered in their commitment to maintain that level of quality. Customer confidence was assured by delegating the decision on qualification to a non-financially involved third party—the USDA grading service.

**ISO 9000**

Traditional certification programs rely on examination of products after they are produced in order to assure that they meet specification requirements. However, they do not address the basic problem of preventing the production of non-complying products. In 1990, Standardization Branch employees began to explore the work of the International Organization for Standardization (ISO) which had developed the ISO 9000 Standards for Quality Management Systems. The purpose of those standards is to provide a basis for development of documented systems for production of products. In theory, by following the system as designed, products are free of defects, or corrective actions are triggered as soon as products go out of compliance with requirements. The LS Program and other USDA agencies saw this type of program as the next step in providing services to the agricultural industry in the U.S.

Under an ISO 9000 system, a company fully documents the steps necessary to produce their product, they keep detailed records of all activities, and regularly audit their records and system to assure that it stays in compliance. Key among the 20 elements in an ISO 9000 system are:
- establishment of a quality system,
- product identification and traceability,
- process control,
- inspection and testing,
- corrective and preventive action,
- control of quality records, and
- internal quality audits.

In addition, outside auditors review and approve the written quality program for adequacy and conduct periodic audits of the program to assure that the company is following the program. This system, rather than product, approach is the newest way that we are providing service to the livestock and meat industry.

In the LS Program, we are offering the “Process Verification” service, which is based on the ISO 9000 standards, with adaptations to fit it to the needs of the livestock and meat industry. Programs that meet all of the elements of this program may be allowed to label their products with a “USDA Process Verified” logo. This signifies that the program has been reviewed and approved and has passed semi-annual audits in operation. So far there are three breed-identification programs approved under this type of program, and we have one complete ranch-to-retail program that carries this logo. We are also using some elements of the quality system and audit program in USDA purchase programs for red meat products. We believe that this type of program is the most likely method by which we can aid the pork industry in the marketing of their products.

How would AMS process verification services benefit the pork industry? I see the possibility of our auditing services being used to verify that producers are following the requirements of quality systems such as the National Pork Producers Council's (NPPC) “Pork Quality Assurance Program.” Since we could not begin to audit all pork producers, we would probably audit and verify the NPPC or third party auditing/quality assurance group which conducts the actual audits of producers. This would allow a claim for USDA oversight of the program and could enhance marketing of products produced under that system.