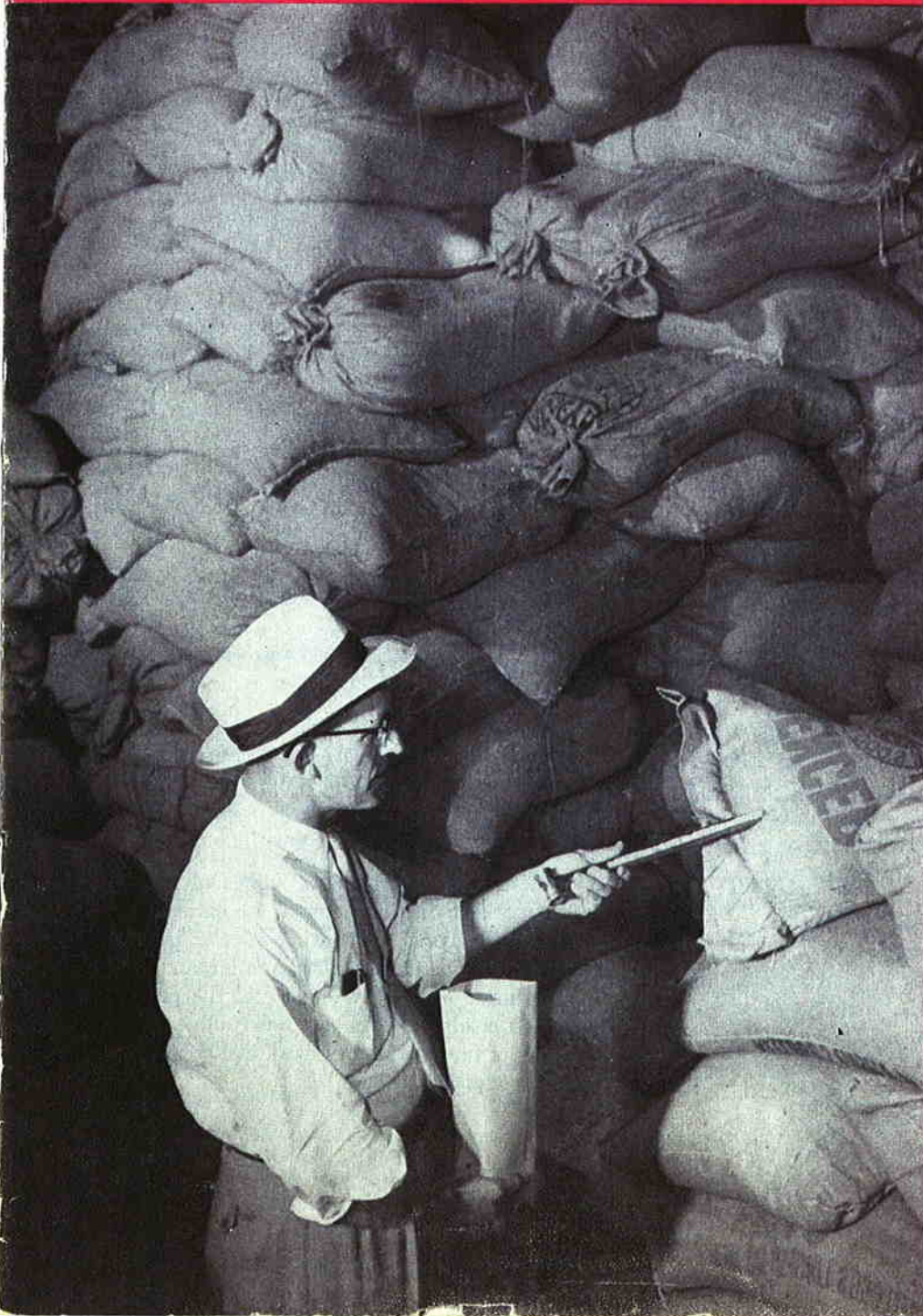


Kentucky FARM AND HOME *Science*

Issued quarterly by the Kentucky Agricultural Experiment Station

Volume 2
Number 3
Summer 1956



READ—

Steers on TV

Butter Quality

Office of Feed
Control Celebrates
50 Years of
Regulatory Work



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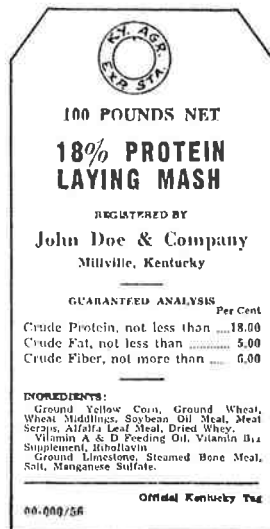
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The Cover

Symbolic of the efficient work of the Office of Feed Control is the work of this inspector as he extracts a sample of feed for analysis. He is using a "core thief," designed for obtaining samples with a minimum of trouble and requiring only a few ounces of the product. His office is celebrating the Golden Anniversary of the beginning of feed regulatory work in Kentucky. For details, see pages 3-8.

Kentucky farmers last year bought approximately 542,000 tons of feed. The state feed law requires that each sack carry a tag on which is stated the guaranteed analysis of the feed. Farmers and other users should make it a habit to read the labels and thus study the relative merits of two similar items by comparing the data given. Little can be learned by "looking" at the feed itself.



Continuous and expanding aid to Kentucky feed users and manufacturers provided by the Office of Feed Control as it celebrates

50 Years of Feed Regulatory Service

By BRUCE POUNDSTONE

This summer marks the completion of 50 years of regulatory work by the Office of Feed Control of the Kentucky Agricultural Experiment Station. The state feed law became effective on June 11, 1906.

During its half-century of service to the feed industry and Kentucky farmers, the office has analyzed about 75,000 feed samples. Its laboratories have been improved until they now rank among the best of their type in this country. Inspectors from the office call regularly on the more than 1,500 retailers of animal feeds in Kentucky, to check on the 6,000 different kinds registered for sale in the state.

Why feed control is necessary and how the present work evolved from its beginning in 1906 are told in this article.

First, let us tell how the alertness of an inspector protected the pocketbooks of prospective buyers of a carload of "animal feed" and the health of their livestock.

A car was "spotted" on a siding beside a Kentucky feed manufacturing plant. The invoice showed the shipment to be "animal feed." A state inspector was on hand to sample this shipment and immediately issued a stop-sale notice because the bags bore no label as to the name of the product or ingredients. Samples from 50 bags were rushed to Lexington for analysis. The analysis revealed the product to contain 21 percent ash, made up largely of ground limestone

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Feed Regulatory Service

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and sand. Microscopic examination showed the presence of cocoa shells, the meal of the cocoa bean and other items. The product was not only objectionable because of a lack of labeling but because it contained cocoa shells, considered poisonous to most classes of livestock. Further investigation revealed that the distributor of this product was assembling feed bag cleanings, discarded pie crust mix, low germinating seed, elevator cleanings, hard candy, ground kidney beans and other products that could not be used for the purpose originally intended, blending them and selling the resulting product as animal feed. No explanation was forthcoming as to why such a large amount of inert material was present or where the cocoa bean products came from. This shipment was later seized by federal authorities on the ground that it originated outside of the state, and it was disposed of under federal supervision.

This happened less than 5 years ago and illustrates several aspects of the animal feed business. Basically, animal feeds are made in large part of by-products. The fact these by-products are not easily identified when ground and mixed means there may be attempts to substitute inferior products for good ones and in varying proportions. It illustrates also the need for control on the part of governmental authorities and

OTHER REGULATORY LAWS

Acts in the 1880s to govern the sale of commercial fertilizers were the first of Kentucky's regulatory laws. Since then other laws of a similar nature have been passed, including:

- Pure Food Law—1898
- Pure Seed Law—1904
- Commercial Feed Control Law—1906
- Pure Food and Drug Act—1906
- Nursery Inspection Law—1926
- Creamery License Law—1918
- Pesticide Law—1956

Active in promoting passage of fertilizer and feed regulatory laws was Dr. Melville A. Scovell (1855-1912), Dean and Director of the Kentucky Agricultural Experiment Station.

finally, the interdependence of state and federal authority in handling these matters.

The mixed feed business of 50 years ago bore little resemblance to the complicated multi-million dollar industry we know today. Trade in feeding stuffs consisted largely of such items as bran, shorts, shipstuff, inferior grades of flour, corn meal, cottonseed meal, oil meal, gluten feed, dried distillery slops and various mixtures of ground grain. Formula feeds were unknown. Such mixtures as were sold were called "mixed feed" with occasionally "dairy," "poultry and chick," "horse" or "cow" feed appearing in the name of these products.

"Let the Buyer Beware"

There were no standards of identity, no uniform basis of labeling existed and little a purchaser could depend on in buying feed other than "let the buyer be aware." Kentucky Agricultural Experiment Station

Job D. Turner was in charge of feed regulatory work in Kentucky from the passage of the act in 1906 until his death in 1946.





(left) A feed sample consisting of "cores" taken from several sacks is thoroughly mixed in a machine, then a portion of the sample is ground in this mill for use in the laboratory.



(right) Reserve portions of feed samples are stored in plastic bags for additional rechecking if requested. Samples are normally kept on file for 3 months.

Bulletin 131, published in 1907, describes the situation: "Feeds are adulterated with corn cob meal, rice hulls, corn bran, peanut hulls and even sawdust; cottonseed meal is being adulterated with cottonseed hulls, and many mixed feeds are almost entirely composed of oat hulls and the by-products of factories making oat meal and offered as superior feed for cattle, horses, etc." Often feeds were found bearing the same name yet varying widely as to feeding value. Prices were no indication of the real value of feeds.

Other States Protected

The situation in 1906 was aggravated further by the fact that states bordering on Kentucky had control laws, and feedstuffs containing inferior products that could not be marketed elsewhere were sold in Kentucky. To prevent this practice and require manufacturers to guarantee and keep their products up to standard, the Southeastern Millers Association and the State Millers Association secured passage of the act known as the "Kentucky Concentrated Commercial Feeding Stuffs Law" by the Legislature.

Administrative responsibility for the law was placed in the hands of Director M. A. Scovell of the Kentucky

Agricultural Experiment Station. Mr. Job D. Turner, of the Experiment Station, was charged with setting up the program, under whose guidance the law was put into operation June 11, 1906. He continued to head this work until his death in 1946.

The objectives of the feed law as described in one of the early bulletins remain unchanged:

1. To require all feeding stuffs to be tagged, giving the name of the feed, the name and address of the manufacturer or dealer, and the manufacturer's or dealer's guarantee stating the percentage of protein, fat and fiber and the names of the ingredients from which the feed is made.
2. To protect the consumer against inferior and adulterated feeds.
3. To protect the manufacturer and dealer against dishonest competition.
4. To promote a more rational use of feeding stuffs.

A new program such as this involved many details. A system of tagging had to be worked out. Standards of identity and names for products were developed. A field inspection system had to be established as well as a legal procedure for prosecution when necessary.

To help the consumer readily ascertain the kind and character of feed, the Station issued tags of three types. (This continued until 1954.) The first of these tags was a manila tag printed in black ink to be attached to a feeding stuff made up of straight feed material, such as that derived from one grain, i.e., wheat bran, cottonseed meal, etc. The second type of tag was a manila tag printed in red ink indicating that a

(Continued on page 6)

Careful weighing on a delicate balance is a part of the procedure of feed analysis. As shown, portions of samples in jars on the right are being weighed directly into the flasks on the left.

