Comerford announcement highlights Beef Council meeting

DRYDEN, NY — The announcement that Peter Comerford, livestock grading specialist for the State Department of Agriculture and Markets, will now be working full time in beef marketing highlighted the quarterly meeting of the Beef Council of the New York Beef Cattlemen's Association.

The meeting was held at Tompkins-Cortland Community College and was attended by county directors and committee chairmen of the state-wide beef organization as well as by members of its executive Beef Council.

The marketing proposal which received final government approval was developed by the New York Beef Cattlemen's Association, Cornell University, and the Department of Agriculture and Markets. Comerford will work primarily with the marketing of feeder calves and fat cattle, and will work with beef cattle producers, marketing agencies including the organized New York Beef Cattlemen's Association, as well as with local livestock auctions, and with packing houses. He will work both to strengthen existing marketing systems and to develop new alternatives. Much of this work will be done on a one-on-one basis between Comerford and the producer.

"Marketing is one of our major concerns. We need both as an organization and as an industry to be doing a better job for the beef cattle producers across the state. This new program should do much to help the individual producer select the best market for his cattle and to market these cattle at the optimum time," explained Allen Peterson of Jamestown, president of the New York Beef Cattlemen's Association.

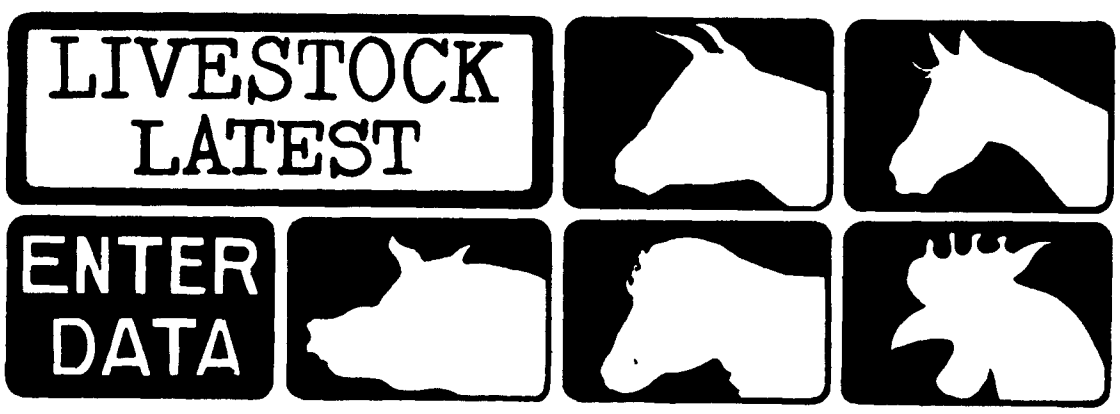
Comerford who has been with the Department of Agriculture and Markets for 25 years will continue to be based at Cornell. Specific requests for marketing assistance and more information may be obtained by writing him at Morrison Hall, Cornell University, Ithaca, N.Y. 14853 or by calling him at 607/256/7712.

The Beef Council approved participation in efforts to secure a marketing order that would lead to a state-wide Beef Check-Off. The New York Beef Cattlemen's Association is working closely with the New York Farm Bureau to initiate this Check-Off. Representing the cattlemen on this project the Jean Shwartz of Earlville, Harold Maynard of Campbell, Donald Patterson of Perrysburg, Allen Thompson of Hunt, Henry Bono of Richmondville, and Don Swartz of Nichols.

A membership drive will be conducted again this spring and will be coordinated by the promotion committee. Council members voted to hold the annual meeting in January, 1985 in Syracuse.

The videotapes of the bulls on the New York Bull Test which is co-sponsored by the Beef Cattlemen's Association were shown during the meeting. Peterson said anyone wishing to view the tapes may contact his county Cooperative Extension office.

County directors were encouraged to develop county beef groups and to assist the Association in their respective counties with membership, promotion, and other projects.



Cornell offers tips on calcium rationing

UNIVERSITY PARK — A recent article by S.E. Ackerman and K. Keshavarz, of Cornell's Dept. of Poultry and Avian Science, discusses the problem of calcium separation in layer rations.

Appearing in the Ontario Egg Producers' Marketing Board newsletter, the report notes that the separation of calcium in layer feeds was observed to occur in all phases of the feed-handling system.

Separation of calcium in feed storage bins was found to result in variations of between 1-2% calcium during a typical three to four day feed-out period. Calcium separation in mechanical feeding equipment was found to result in calcium levels of between 4.5% to over 9%. The higher levels of calcium may have been an accumulation of finely ground limestone over a period of many days. Samples of feed taken directly from 11 farm mills had calcium levels averaging 4.7% with some samples having levels as high as 5.2%-5.4% calcium.

While inadequate calcium intake affects the production performance, excessive calcium intake could impair the production performance by reducing the palatability of the diet or by interfering with utilization of other nutrients. Consequently, while it is extremely important to provide the laying birds wiht adequate levels of calcium, both over and uncer consumption must be prevented.

The delivery of a high-quality, nutritionally balanced ration to every hen in a laying house is not small task. A feed manufacturer or farmer can mill a feed that is exactly right. But by the time this feed is augered into a poultry house and dragged 500 to 1000 feet, and every bird along the line pecks over the choicest particles, there may be little resemblance to the feed delivered to the farm. The separation of feed ingredients including calcium is going to occur. The further it is moved and the more it is agitated, the greater the separation. Unless a feed is pelleted, some separation will occur, but even pelleted feeds are not immune to some separation as pellets are crumbled.

Because of some calcium separation in augers, transfer distances should be kept as short as possible. In addition, augers should be kept in good repair to reduce vibrations.

When air delivery is used, a distributor or baffle should be used in the top of the bin to cause the feed to drop into the center of the bin.

Farms that mill feeds from high-calcium concentrates have a couple of options for reducing the separation of calcium. One option is to purchase a high-calcium concentrate in pellet form. Another is to substitute a part of the ground limestone with oyster shell or coarse ground limestone.

There is a consensus that large particles of calcium are less inclined to separate. Also, some consideration is being given to the use of low-calcium concentrates in milling feeds and then metering the calcium into the ration as it is augered into the poultry house.

One option used by farms that mill feeds is to mill only enough feed to last about one day. While some calcium separation occurs in the feed handling system, there is probably less day-to-day fluctuations in the amount of calcium consumed by a flock.

Since hens will pick out the larger particles of calcium and other ingredients, there is a tendency for these birds to consume excessive levels of calcium. To reduce this opportunity, feeders should be operated at as high a speed as possible. If the feeder line is exceptionally long or if the speed of the feeder cannot be increased, surge bins may be located at the half-way point in the feeder line.

One of the most important management practices to avoid excess levels of calcium due to separation is to force birds to clean up the feed once each day. When attempting this procedure, be sure some birds are not unintentionally restricted.

Penn State to host Poultry Conference

UNIVERSITY PARK — Applications are now being accepted for enrollment in Penn State's Poultry Sales and Service Conference scheduled for April 10 and 11.

Registration begins at 9 a.m. on Tuesday in the lobby of the J.O. Keller Conference Center, and sessions run until 4:15 p.m., with lunch scheduled for 11:30 to 1:15, and the Poultry Products Smorgasbord scheduled for 7 p.m. at Mountain Acres Lodge.

Wednesday's seminars begin at 8:30 a.m., with the morning's last presentation at 11 a.m. All meetings will be held in Room 402-403 of the J.O. Keller Building Conference Center.

Cost of the two-day event is $45.00 payable in advance or at the time of registration. Preregistration is encouraged, and the remittance, payable to The Pennsylvania State University, may be mailed to: Agricultural Conference Coordinator, The Pennsylvania State University, University Park, Pa. 16802. Phone: 814-865-9547.

Lodging is available at the Nittany Lion Inn, adjacent to the Conference Center, and reservations may be made by contacting the Inn at 814-237-7671.

Study confirms value of poultry manure

UNIVERSITY PARK — A ten-year study conducted by C.S. Baldwin, of the Ridgetown College of Agricultural Technology, from 1972 to 1981, was aimed at determining the effect of beef, swine and poultry manure, with and without commercial fertilizers, on the growth and yield of corn.

The study also explored the levels of phosphorus, potassium, magnesium and pH as a result of these treatments. The poultry manure used was fresh caged layer manure, from a unit cleaned out approximately every four weeks.

Rates of application of five, ten and twenty tons/acre were compared with a control plot receiving no manure and no chemical fertilizer. Plots with poultry manure, with and without commercial fertilizer at 50 lbs./acre of N, P_2O_5 and K_2O were included, along with plots having no manure and two different fertilizer treatments, one with only nitrogen and one with all three chemical nutrients.

The manure was applied in late fall and plowed in immediately. The commercial fertilizers were applied in spring. Because of the long term nature of the trial, a wide range of planting dates (May 11-28) were experienced, while harvest dates varied from September 24 to October 22. Annual rainfall varied from 31.95 inches to 43.60 inches over the 10 year period.

The average nutrient value of the manures used are shown in the following table.

Nutrient value of manures researched 1972-81

Kind of Manure	N	P_2O_5	K_2O	Mg	Ca	Dry Matter (%)
		Nutrient*				
		lbs/ton				
Beef	11.4	6.1	14.2	2.1	5.6	24
Swine	18.0	13.8	9.0	3.2	10.4	24
Poultry	33.3	33.8	11.8	4.7	51.6	26

*-represents the 10-year average

This table confirms previous work indicating the relatively high value of cage layer manure, and also the fact that it contains relatively low amounts of potassium but high quantities of calcium (residue from calcium in the diet). The dry matter level reported is about that of fresh manure; manure from high rise situations or units where some natural drying takes place before the manure is removed might show higher dry matter values.

The ten year averages for the corn yield response to poultry manure and/or commercial fertilizer are summarized below.

Effect of poultry manure, fertilizer on corn yield, 1972-1981

Rate of Application (Tons/acre)	None	Commercial Fertilizer 50-50-50*
	bushel/acre	
0	75.3	113.7
5	117.9	129.6
10	128.3	134.0
20	130.5	133.0

* indicates that N, P_2O_5 and K_2O were each applied at 50 lbs/acre

The greatest response to the poultry manure resulted from the 5 ton/acre rate of application. (This response was similar to the ones obtained with beef and swine manure.) The next increment of manure (ie. the 10 ton rate) gave a 10.4 bushel increase, while the 20 ton rate only increased yield slightly.

It is of interest to note that the response to 5 tons per acre of poultry manure was slightly greater than the response to commercial fertilizer when 50 lbs/acre each of N, P_2O_5 and K_2O were applied (117.9 vs. 113.7 bushels/acre). While the commercial fertilizer gave a worthwhile response when added to five tons of poultry manure, the responses when 10 or 20 tons of poultry manure were applied were quite marginal.

Another important consideration when repeated applications of manure and repeated single crop cultures are involved is the change in soil nutrient levels over time. As might have been expected, the effect of poultry manure at the two highest levels (10 and 20 tons/acre) with or without commercial fertilizer, gave rise to phosphate levels that were classified as excessive. On the other hand, potassium and magnesium levels were relatively unaffected either by poultry manure alone or in combination with commercial fertilizer.

Somewhat surprisingly, the pH (acidity level) in the soil seemed unaffected by the manure of fertilizer applications. This is surprising in view of the high levels of calcium found in the original manure, but we must assume that the natural breakdown

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