

LIVESTOCK LATEST

U. of Del. offers broiler computer programs

BY DAN H. PALMER
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NEWARK, Del. — Approximately 200 new broiler houses were constructed on Delmarva in 1985. Most grow-out companies are anxious to see an equal or greater number of houses constructed in 1986. The future looks good indeed for the chicken meat industry.

When viewed from a broad perspective, new broiler housing is definitely a good decision for Delmarva. However, each grower must look at his special set of circumstances before deciding to build. First-time growers have even more homework to do than existing producers who wish to expand. It can sometimes be hard to assemble and analyze all the information you need to collect before the construction crew arrives. This is where a computer can help.

Delmarva farmers are especially fortunate to have a strong poultry industry during these times of low grain prices. Broilers offer the opportunity to diversify and to make more efficient use of existing farm labor. In the face of today's high fertilizer costs and low crop prices, poultry manure has acquired greater economic importance. And existing farm equipment can be better used in handling this valuable by-product. The trick is to put dollar figures to each of these potential benefits.

University of Delaware farm management specialist Dr. Don Tilmon has developed computer programs designed to help people interested in putting up new poultry housing. The programs are for broiler, roaster and cornish production. The Grower Committee of Delmarva Poultry Industry, Inc. (DPI) assisted Tilmon

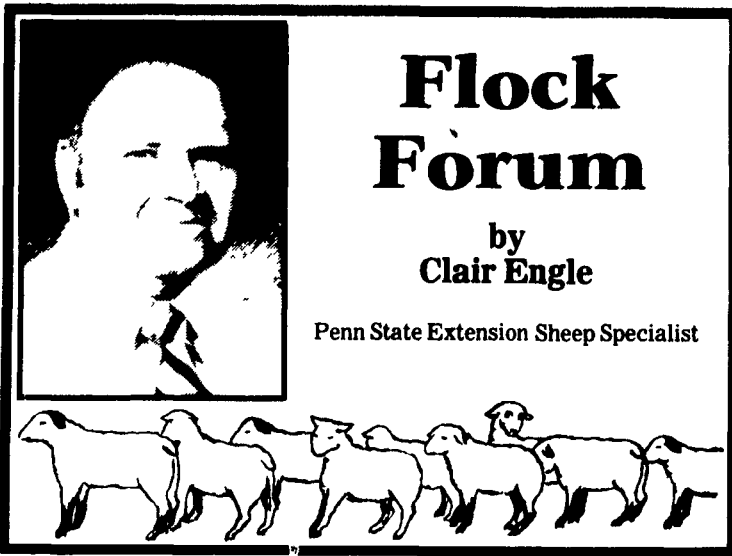
with the basic input information and continues to update the values each year.

Each program is based on 19 items, or values. Each value may be changed, one at a time, to reflect the exact situation of the person using the computer. Items covered in the analyses are: number of houses, capacity per house, batches per year, cost per house, years house financed, equipment cost per house, years equipment financed, interest rate, utilities per year per house, repairs per year per house, taxes and insurance per year per house, required capital improvement per year, cleanout per year per house, contract payment per bird, percent inflation per contract payment, percent inflation per costs, number-of years, beginning year, and house labor per thousand birds.

Once the value for a given grower is entered, the computer will analyze the information and print the results. The printout gives yearly totals, costs per 1,000 birds, costs per square foot, cumulative totals and net income per hour of labor. The printout can show this for each year up to a total of 20 years.

All this information can be available *before* you've made any commitments regarding financing or construction. There's no charge for the service and you may keep the printout for study and future use. Naturally, the university respects the confidentiality of anyone using the service.

If you're interested in using one of these programs, contact me at the University of Delaware College of Agriculture Sciences Research and Education Center (formerly the Substation), RD 2, Box 48, Georgetown, DE 19947. Telephone (302) 856-7303.



Flock Forum

by
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Lamb Management before weaning - It has been established that lambs can be weaned at 60 days of age and continue to grow well, providing a proper ration has been formulated. However, this is not a routine practice for too many producers at the present time.

Normal development of the stomach is related both to age and to feed. If lambs are to be weaned early, they must be given a source of palatable feed as early in life and as long before weaning as possible. Thus, creep feeding is essential for early weaning.

Creep Feeding - Lambs will begin to nibble at grain and hay when they are about a week old, so you should provide access to creep feeders in grouping pens seven to 10 days after birth. Although lambs will eat only small amounts for the first three or four weeks, that early creep feeding will establish both rumen function and the habit of eating.

Feeds for lambs - Grains are the major source of energy and usually are the most costly feeds. In developing "least cost" ration, you need to consider all alternative energy sources and keep in mind the optimum level or limit for lamb feeding that may apply to a specific ingredient.

Corn or barley can be used to supply the total grain portion of the ration for lambs, but wheat appears to give the most consistent results when it makes up 50 percent or less of the grain portion. Dried molasses beet pulp and oats may be fed to lambs. Both add bulk to grain rations which can be beneficial in certain feeding programs. Peas, beans, rye, and other energy sources, may also be incorporated in lamb rations, in limited amounts, if costs warrant their use.

Liquid molasses may be used in limited amounts to reduce dust and bind fine feed particles together. Molasses can also increase palatability of a feed.

Roughages - Alfalfa hay is an excellent roughage for lamb feeding. It is plentiful in most areas of Pennsylvania and usually is high in protein, minerals (calcium), and vitamins. Corn silage and haylage are highly palatable lamb feeds, however they should be fed in limited amounts due to their bulkiness and lower levels of both protein and energy. Consequently lambs cannot consume enough energy and protein to make maximum gains.

Methods of feeding - The most efficient method of feeding weaned lambs will depend on your facilities, flock size and the cost and availability of both labor and equipment. You will not need elaborate feeding or feed-processing facilities.

Producers often "hand-feed" small groups of lambs, feeding given amounts of grain and roughage separately. Under these conditions, processing the feed ingredients is usually not justifiable. If processing equipment and labor are available on the farm, semi-automated hand-feeding twice daily in fence-line feeders may be an economical feeding system for you.

Feed processing - Processing grain is not required for lambs after 60 days of age, especially if they have been on a creep ration. The primary function of processed feeds is to prevent lambs from sorting and selecting their preferred grains, and also to permit a uniform blending of a complete ration. Processing can also make the feed easier to store and handle mechanically. Coarse grinding, cracking, rolling and pelleting are all common forms of feed processing that work well in preparing complete sheep feeds. Finely ground (dusty) feeds are known to reduce palatability, lamb gains, and feed efficiency.

Facilities - For feeding, watering and housing weaned lambs, you will need:

- Fence-line feeders, 12 inches per lamb.
- Self-feeders, 1 to 3 inches per lamb.
- Dirt feedlot, 20 square feet per lamb.
- Paved feedlot, 10 square feet per lamb.
- Barn area (winter), 10 to 12 square feet per lamb.
- Shade (summer), 4 to 6 square feet per lamb.
- Fresh water, 0.5 gal. per lamb per day. Allow one foot of open tank per 10 head of sheep, or one automatic bowl per 20 head.

Suggested creep and finishing rations - Feed a simple grain mixture with quality alfalfa hay for roughage. Following are three rations and some feeding directions for growing and finishing home-grown lambs. Since both rations are complete, that is, they contain all the primary ingredients, we recommend they be pelleted or ground using a 3/8 inch screen.

Feeding directions - 1) Hand-feed small amounts of the complete rations at least twice daily to lambs when two weeks of age. Clean troughs before each feeding so that feed is palatable to lambs. 2) Grind and mix only small amounts at first when lambs are small and eat only small amounts. 3) A 3/8 inch screen may be required in the mill for best results. Vitamins and minerals should be mixed with supplement first and then with the other ground ingredients. Mix thoroughly. Make sure feed is fresh and palatable. 4) When lambs are eating well, the complete ground mixed rations may be self-fed. They may also be hand-fed but kept before the lambs at all times in a bunk or trough. 5) Rations are medium energy rations. It may be advisable to vaccinate lambs for enterotoxemia. 6) Ration 2 may be most useful when good quality hay is not available. 7) All rations contain adequate minerals, therefore, it should not be necessary to provide mineral supplements. Free-choice loose salt may be provided. 8) Provide plenty of clean, fresh water. 9) Rations 1 and 2 could be used as performance test rations for ram lambs.

Ingredient	Ration (lb)	Lambs start to 55 lb. Lambs 55 to Mkt. Wt.		
		1	2	3
No. 2 shelled corn		1,060	-	730
Ground ear corn		-	1,200	-
Oats		-	-	440
Alfalfa hay		500	-	500
Dehydrated alfalfa		-	300	-
Linseed meal		300	365	200
Liquid cane molasses		100	100	100
Feed grade limestone		15	15	10
Trace mineral salt		10	10	10
Salt		15	10	10
Vitamin A (IU)		3,000,000	2,000,000	2,000,000
Vitamin D (IU)		200,000	400,000	200,000
Vitamin E (IU)		5,000	5,000	5,000
Antibiotic*		50 gr	50 gr	30 gr.
Calculated analysis (%)				
(Air-dry basis)				
Protein		16.0	16.0	15.0
TDN		72.0	64.1	69.2
Calcium		0.64	0.58	0.55
Phosphorus		0.37	0.32	0.31

* Add a prescribed antibiotic in consultation with your Veterinarian.

Livestock Ledger



By
Chester D. Hughes
Extension Livestock Specialist

Cooler Nurseries Can Pay

It may pay to turn down night-time heat on nursery pigs if buildings are dry and draft-free. Three studies, in which night-time nursery temperatures were turned down for periods of four, eight, 12 and 16 hours, showed temperatures could be turned down from 92 degrees beginning five days after weaning with no ill effects. It is critical though, that the pigs have that five-day adjustment period after weaning to keep them comfortable so they will start eating.

Studies at Kansas State University looked at continuing the temperature reduction in weekly stages, both night and day, until the temperature was dropped nine degrees every week for five weeks. The control temperature was maintained at 90 to 92 degrees.

The pigs developed a longer hair coat and were rougher in appearance, but they showed no

basic difference in performance on mortality at the end of studies conducted last winter.

The heating cost to maintain 100 pigs for five weeks in the building at 92 degrees was about \$1,000. In the study in which the temperature was reduced weekly, heating costs were reduced to \$137. In studies in which temperatures were reduced at night and increased during the day, the heating bill was cut by about half.

Keep in mind that turning down the temperature is *not* worth the saving in energy costs if the pigs get sick or eat more feed to compensate. You can check for drafts in your nursery by following smoke from a smoke bomb. Also, nurseries with expanded metal flooring will keep pigs healthier at lower temperatures than those with damp and cold concrete floors. It may be worth a try, but use caution.

Former Ag Secretaries to speak at Pork Congress '86

ST. LOUIS, MO — The appearance of three former U.S. Secretaries of Agriculture on the same program will be a highlight of the 1986 American Pork Congress, March 11-13 in St. Louis.

Former Secretaries Earl Butz, Orville Freeman and Clifford Hardin will discuss how to build a sound agricultural economy for the future during a General Session on

the morning of Wednesday, Mar. 12. At a separate program later that day, John Chrystal, a well-known Iowa banker, will discuss the present farm credit crisis and the future of the family farm.

The Congress is the pork industry's largest annual event. It includes a trade show, featuring the latest equipment and services available to pork producers from

various companies. The trade show will be open all three days of APC at the A.J. Cervantes Convention Center.

Attendees can save \$2.50 off the on-site registration fee of \$10 by sending in a pre-registration form with proper payment by February 14. Pre-registration forms may also be obtained by writing: APC '86, P.O. Box 10382, Des Moines, Iowa 50306.