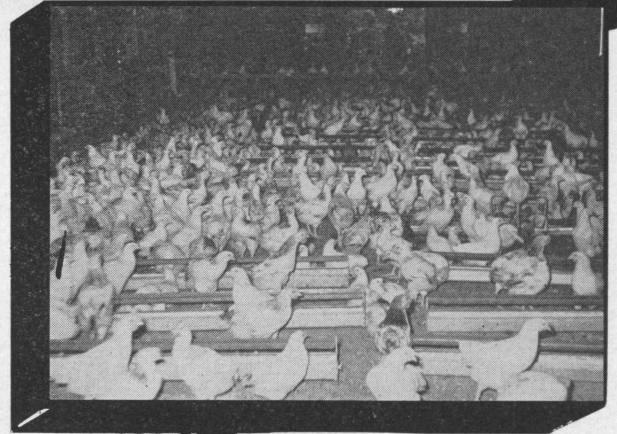
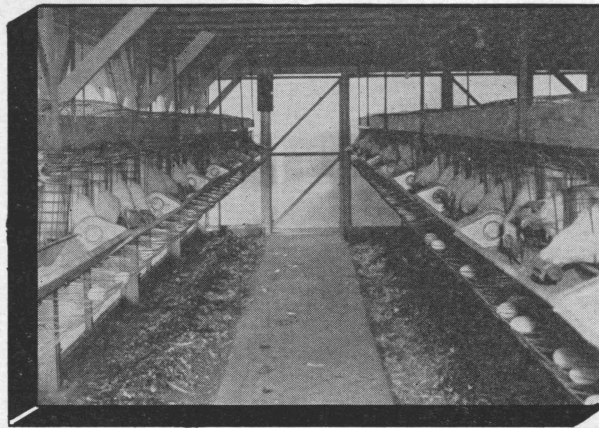


Planning for The Business of
POULTRY FARMING



TEXAS AGRICULTURAL EXTENSION SERVICE

G. G. GIBSON, DIRECTOR, COLLEGE STATION, TEXAS

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Planning for The Business of Poultry Farming

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Many think of a chicken farm as an opportunity to retire with little work and a small, steady income. Others look at the poultry business as a method of "getting rich quick." Actually, a lot of work is connected with the poultry business although it provides a substantial income for those interested in poultry and want to operate a poultry farm as a business rather than a hobby or sideline. The poultry business is highly competitive with great fluctuations in the market price of the products. These fluctuations mean that growers sometimes operate at a loss, but other times at a high profit.

Small producers can get in and out of the poultry business quickly. When prices are good, small producers are attracted to the business. The extra eggs and poultry they produce cause a decrease in the price of poultry and eggs. This reduces the profit for commercial producers and provides small profit, if any, for the man who jumps in and out of business.

The price of eggs is seasonal. Eggs are always plentiful in late winter and early spring and scarce in the summer and fall. The result is low prices from January through June and relatively high prices from July through De-

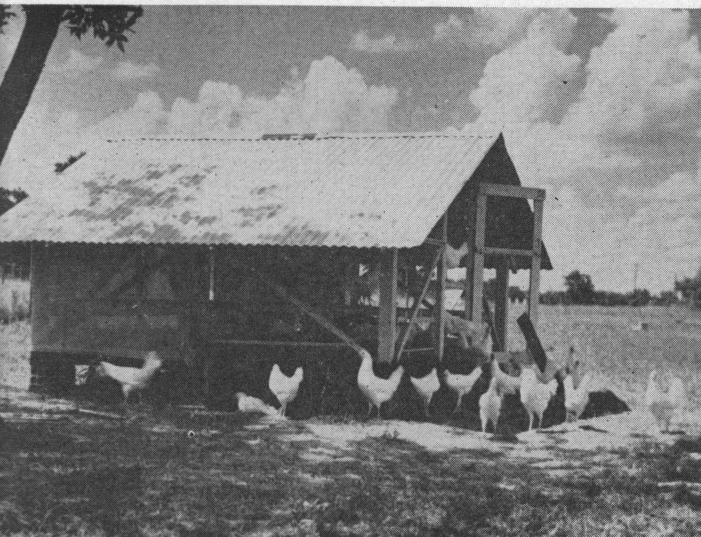
ember. Because of these fluctuations in price, a producer must consider poultry as a long-range operation.

An important byproduct of the poultry industry is the use of *manure* as fertilizer. Chicken manure is valuable as a fertilizer because it contains nitrogen, potash, and phosphoric acid. One hundred hens averaging 5 pounds each in weight have been estimated to produce 4,250 pounds of manure each year containing 43 pounds of nitrogen, 16 pounds of potash, and 34 pounds of phosphoric acid. This is a value of approximately 30 cents per hen.

The plant food content of a ton of broiler house manure is 30 pounds of nitrogen, 20 pounds of phosphoric acid, and 18 pounds of potash. These amounts are equal to that contained in about 200 pounds of nitrate of soda, 100 pounds of 20 percent superphosphate, and 35 pounds of muriate of potash. This averages approximately 4 cents per broiler.

As a supplement to poultry, it is advisable to have some pastureland or cropland to which poultry manure can be added for an increase in production on this land, thereby increasing the profit obtained from poultry.

Range shelters are good for growing pullets.



Proper housing is a must for profitable poultry.





Feeder and water space cannot be neglected.

Several enterprises in the poultry industry offer excellent opportunities for the new producer. They are commercial egg production, hatching egg production, and broiler production. Since each enterprise is a specialized type of operation, the producer should select only one of these operations and concentrate his time and capital on it.

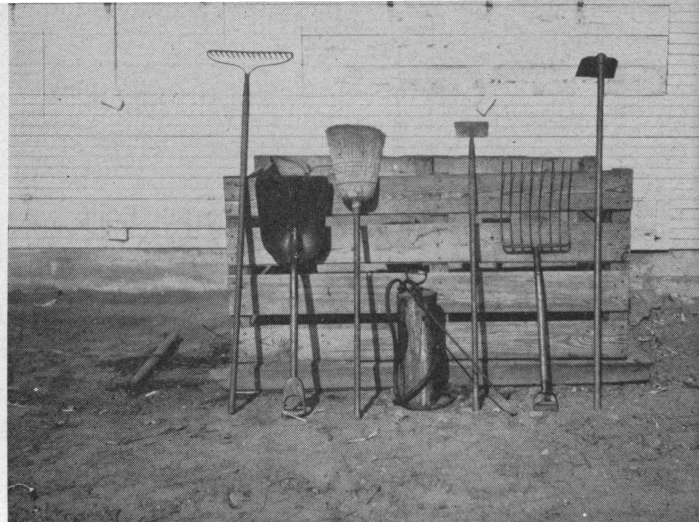
Limited finances can easily hamper or prevent programs or practices needed for efficient operation. Going into the poultry business without adequate financial backing may prove to be costly and unwise. Chickens must have proper equipment and management to be profitable.

Further information on production may be obtained from the bulletins and blueprints listed in the back of this publication which are available from your county extension agents.

Commercial Egg Production

Two general methods of egg production are used. They are the floor and the cage methods. Both have their advantages and disadvantages. Each producer should decide which type of operation is best suited to his needs, ability, and temperament.

Eggs should be sold on a graded basis if possible, for maximum profit. Every producer should attempt to market a high quality egg, thereby benefiting from a grading program.



There are many incidentals which must be purchased

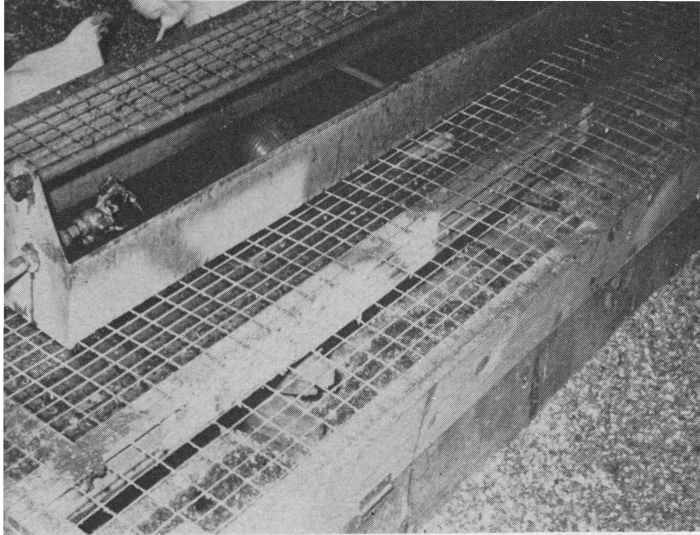
FLOOR METHOD

A producer using the floor type of production should plan to keep at least 500 hens, which would be a part-time operation, and not more than 3,000, without supplemental help. A well-managed laying flock should produce an average of 200 eggs per hen per year. Many growers go well above this mark. Since the same amount of feed is required for maintenance of hens in low production as in high production, a high rate of production becomes essential for maximum feed efficiency. When hens lay at a high rate, they consume more feed than low producers; but the pounds of feed per dozen eggs is less, thereby increasing the profit to the producer.

Use Tables I and II to determine the investment required for an efficient operation for the size flock planned. The operation should be large enough for efficient use of equipment to insure payment for the time spent caring for the flock.

CAGE METHOD

For efficient use of equipment and to facilitate marketing of quality eggs, a cage operation should not be less than 500 birds. Currently, a 2,000 bird plant is considered satisfactory. A person can handle less birds in cages than on the floor because he must devote much of his time to raising replacement stock, which is a year-round project. A high rate of production in the cage house must be maintained to make it profitable. Feed efficiency can be improved by this high rate of



Automatic waterers save labor but must be checked frequently.

production which requires less feed per dozen eggs.

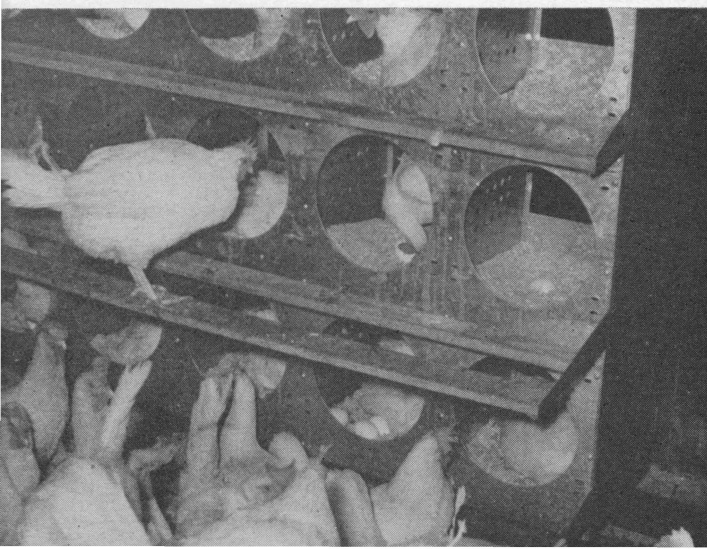
On Tables III and IV check the investment required for an efficient operation, making the adjustments to fit the size of the flock. The first brood of birds to fill the cages can be brooded in the cage house, but additional equipment must be obtained for this initial brooding. Inexpensive infrared brooders are popular for the initial brood.

Hatching Egg Production

Hatching egg production requires the same equipment as the floor method of commercial egg production but additional floor, feeding, and watering space must be provided for male birds that will be added in the flock.

Birds kept for broiler hatching eggs are large meat types which consume more feed for

Metal construction gives longer life and is easily cleaned.



body maintenance than light breeds used for commercial egg production. Also, meat-type birds are expected to lay less eggs per year than breeds designed for egg production; therefore a good premium above market price is essential to make the broiler hatching egg business a profitable enterprise.

Use Tables I and II to determine the investment required for an efficient operation for the size flock planned. An egg cooling room is essential to high hatchability.

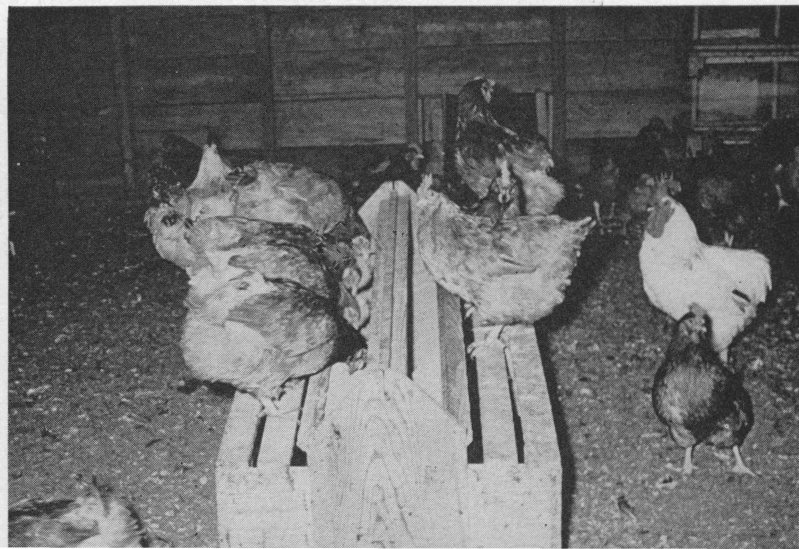
Broiler Production

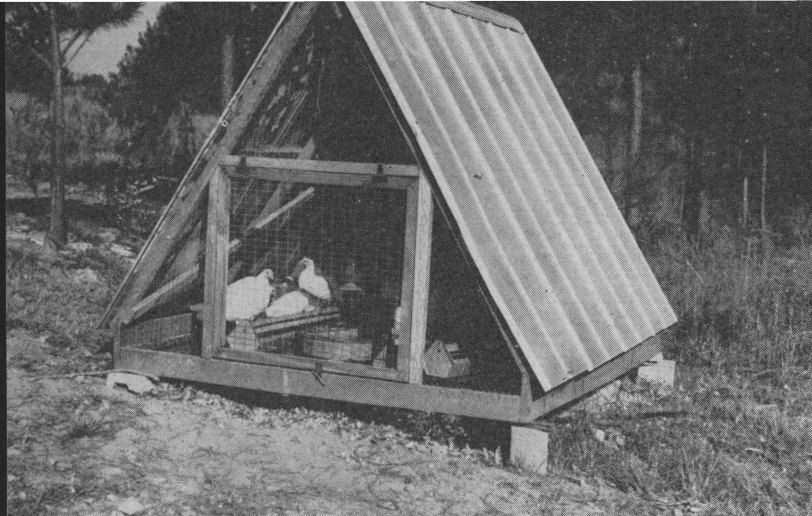
Broiler growers operate on a small margin of profit per bird. Therefore, an operator must have enough volume, as well as raise four or five broods a year, to provide a good income. A broiler project should have at least 3,000 birds per brood with broods of 6,000 to 9,000 preferred. More birds can be cared for by the use of mechanical equipment or hiring of supplemental labor.

A grower must produce a plump, well finished broiler weighing 3 pounds in 9 weeks, with a feed conversion of 1 pound of meat for each 3 pounds of feed or less. To keep transportation costs from the farm to the processing plant at a minimum, broiler production should be centralized near such plants.

On Tables V and VI check the investment required for an efficient operation, making adjustments to fit the size of the flock.

Homemade equipment can cut down the initial investment.





A brooder-range house combination is good for cage replacements.



Some means of egg cooling and care must be provided.

Table I
Suggested Investment for 1,000 Hen Laying Flock

BROODING AND REARING		
Building, Land, and Equipment	Number	Local Cost
Brooder house—1,000 square feet floor space	1	_____
Brooders—400 to 500 capacity	3	_____
Water fountains—3 gallon fountains (2 per 100)	26	_____
Feeders—small 4 foot length (1 per 100)	13	_____
Feeders—medium size 4 foot length (2 per 100)	26	_____
Water fountain—range (1 per range shelter)	13	_____
Feeders—range 8 foot length (1 per 100)	13	_____
Range shelter—10 x 10 (100 birds per shelter)	13	_____
Land, acres for range (Use 1/3 each year for 3 year rotation)	15	_____
 LAYING HOUSE AND EQUIPMENT		
Laying house—3,000 square feet floor space with feed room	1	_____
Waterers—fountains 4 foot troughs or cups or circular pans	10	_____
Feeders—5 foot length (3 inches per hen minimum)	25	_____
Nests—1 per 5 hens	200	_____
Egg room with egg cleaning and cooling equipment	1	_____
Miscellaneous—light time clock, sprayer, house cleaning equipment, egg baskets, etc.		_____
TOTAL		=====

Table II
Estimated Annual Income and Expense

FOR 12 MONTH LAYING PERIOD

	Amount	Local Value
Gross Income		
Eggs (200 per hen @ average yearly price of graded eggs)	_____	_____
Hens (pounds x prevailing price less 15 percent for mortality)	_____	_____
Total Gross Income		=====
Expenses		
Chicks—sexed high quality pullets (1200-1400)	_____	_____
Feed—growing pullets, approximately 2,500 pounds per 100 pullets	_____	_____
Feed—approximately 26 pounds per 100 hens per day at 60 percent production	_____	_____
Oyster shell—3 pounds per bird per year	_____	_____
Litter	_____	_____
Electricity and fuel—for brooding and laying house	_____	_____
Taxes, Insurance, and Interest	_____	_____
Total Expenses		=====
Return to Capital and Family Labor		
Gross Income		_____
Total Expenses	_____	
Depreciation:		
Buildings (8 percent)	_____	
Equipment and range shelters (10 percent)	_____	
Total Deductions		=====
Return to Capital and Family Labor		=====

Table III
Suggested Investment for 1,000 Bird Laying Cage Operation

BROODING AND REARING REPLACEMENTS

Building, Land, and Equipment	Number	Local Cost
Brooder range house combination—(for 100 birds)	6	_____
or confinement rearing house—(3 pens, 200 birds per pen)	1	_____
Brooders—200 capacity	1	_____
Feeders—small, 4 foot length (1 per 100)	4	_____
Waterers—3 gallon fountains (2 per 100)	8	_____
Feeders—medium, 4 foot length (2 per 100)	12	_____
Feeders—8-foot length	6	_____
Waterers—one 4-foot trough per 100 birds	6	_____
Land, acres for range (Use 1/3 each year for 3 year rotation. Not necessary if confinement rearing is used.)	15	_____

HOUSE AND EQUIPMENT

House to hold 1,000 cages with feed room	1	_____
Cages	1,000	_____
Egg room with egg cleaning and cooling equipment	1	_____
Miscellaneous—light time clock, sprayer, house cleaning equipment, egg baskets, etc.	_____	_____

TOTAL

=====

Table IV

Estimated Annual Income and Expense

FOR CAGE HENS PER YEAR

Gross Income	Amount	Local Value
Eggs (250 per cage @ average yearly price of graded eggs)	_____	_____
Hens (pounds x prevailing price less 5 percent for mortality. About 10 percent will be culled each month.)	_____	_____
Total Gross Income		=====
 Expenses		
Chicks—high quality sexed pullets (1200-1400)	_____	_____
Chicks—20 percent replacement every two months	_____	_____
Feed—Approximately 28 pounds per 100 hens per day at 70 percent production	_____	_____
Feed—growing pullets, initial brood—2,500 pounds per 100 growing pullets	_____	_____
Feed—growing pullets, replacements—2,500 pounds per 100 growing pullets	_____	_____
Oyster shell—3 pounds per cage per year dependent upon type feed used	_____	_____
Litter for brooding	_____	_____
Electricity and fuel—for brooding and lighting layers	_____	_____
Taxes, Insurance, and Interest	_____	_____
Total Expenses		_____
 Return to Capital and Family Labor		
Gross Income		=====
Total Expenses	_____	
Depreciation:		
Buildings (8 percent)	_____	
Equipment and brooder range house combination (10 percent)	_____	
Total Deductions		_____
Return to Capital and Family Labor		=====

Table V
Suggested Investment for A 3,000 Bird Broiler House

Building, Land, and Equipment	Number	Local Cost
Broiler house—3,000 square feet of floor space with feed room	1	_____
Brooder—500 capacity	6	_____
Water fountains—one gallon size	30	_____
Waterers—automatic 4-foot troughs (1 per 200)	15	_____
Feeders—small, 4-foot length (1 per 100)	30	_____
Feeders—medium, 4-foot length (3 per 100)	90	_____
Miscellaneous—sprayer, house cleaning equipment, etc.	_____	_____
TOTAL		=====

Table VI
Estimated Income and Expense

	Amount	Local Value
Gross Income		
Broilers—average weight of broilers x number of broilers at prevailing price. (A 5 percent mortality may be expected.)	_____	_____
Total Gross Income		=====
Expenses		
Chicks—top quality chicks	_____	_____
Feed—9 pounds per bird for nine weeks	_____	_____
Litter	_____	_____
Electricity and fuel	_____	_____
Taxes, Insurance, and Interest	_____	_____
Total Expenses		=====
Return to Capital and Family Labor		
Gross Income		_____
Total Expenses	_____	
Depreciation:	_____	
Buildings (8 percent)	_____	
Equipment (10 percent)	_____	
Total Deductions		_____
Return to Capital and Family Labor		=====

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POULTRY BULLETINS
and
BLUEPRINTS

*Available From Your County Agricultural or Home
Demonstration Agents*

Bulletins

- B-204 Broiler Production
- C-285 Capons
- C-274 Culling Poultry for Profit
- C-298 Growing Chicks for Flock Replacement
- C-338 Laying Cage Management
- B-206 Managing the Laying Flock
- B-231 How to Produce Quality Eggs
- B-71 Poultry Yard Equipment
- C-324 Guide for Controlling Parasites of Livestock and Poultry
- B-173 Internal and External Parasites of Poultry
- B-221 Turkey Production
- C-322 Trouble Shooting Chart for Poultry
- MS-887 Poultry Disposal Pit

Blueprints

- 166 Brooder House and Range House, 12' x 12', for 300 chicks, shed roof
- 386 Broiler House—6,000 capacity
- 352 Laying House, 24' x 64', Gable for 500 Hens
- 387 Laying House for 1,000 Hens
- 397 Laying Cage House
- 398 Range Shelter, Gable roof, 9' x 11'
- 244 Range Feeder for Poultry
- 309 Field Watering Device
- 327 Poultry Waterer
- 354 Community Poultry Nest
- 361 Poultry Feeder
- 385 Window details for Texas Poultry Houses

Information in this publication emphasizes some of the steps in the Texas 9-Point Livestock and Poultry Program, sponsored by the Texas A. & M. College System. See your local extension agents for more details on this program.