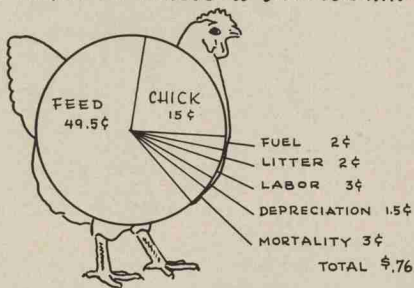
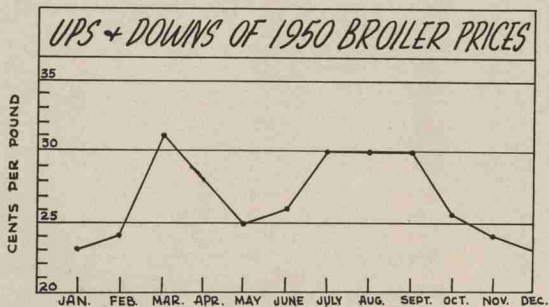


What it costs to raise a broiler.....



Some Estimated Costs of Producing Broilers



Broiler Prices Paid Producers by Months

June, 1951

Club Series No. 59 (Revised)

N. C. State College of Agriculture and Engineering of the University of North Carolina
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N. C. AGRICULTURAL EXTENSION SERVICE

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Broiler Production Manual and Record Book

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The broiler project, as here noted, is planned for the club boy or girl who would like to make a fair profit by investing a reasonable amount of money for a short period of time, and for those desiring to learn modern methods used in raising chicks.

It is suggested that this project be selected by those who cannot conduct a project in poultry for a longer period of time than three months, or by club members who are conducting the advanced poultry project. This will enable the latter group to use more fully their present equipment. The club member who selects this project and follows the instructions through to completion, using disease-free chicks and practicing the proper methods of brooding, feeding, housing, sanitation, and management should receive a fair profit for his labor, and develop his knowledge of practical poultry production. However, the profits made on this project will depend to a large extent on six factors:

1. The percent of the original number of chicks raised.
2. The quality of the broilers produced.
3. The time of year they are sold.
4. The rapidity with which the broilers or fryers reach $2\frac{3}{4}$ to 3 pounds in weight.
5. The thoroughness of the work by the club member.
6. The distance to a reliable market.

Objectives

1. To teach club members through practical experience the modern methods used in raising broilers.
2. To develop $2\frac{3}{4}$ -pound broilers in the shortest possible period of time.
3. To have broilers ready to market during the seasons of high prices.
4. To interest more boys and girls in poultry work.

Requirements

1. Keep an accurate record.
2. Project be completed in 12 weeks after it is started.
3. Secure suitable equipment such as a brooder house, brooder, drinking founts, feed hoppers, etc.
4. Start with 100 or more pullorum clean, broiler strain baby chicks.
5. Follow instructions in this manual.
6. Supply 9 bags of broiler mash for each 100 chicks.

Equipment Needed

1. Brooder house (large enough to allow $\frac{3}{4}$ to 1 square foot of floor space for each chick brooded, exclusive of space occupied by brooders, feeders and waterers).
2. One brooder, one thermometer and 30' chick guard material.
3. For the first 3-week period, three half-gallon drinking fountains for each 100 chicks brooded, after that time provide 2 drinking fountains of 3-gallon capacity for each 100 chicks.
4. One mash hopper 5 feet long for each 100 chicks (to be used first 3 weeks).
5. Two mash hoppers 4" high x 6" wide and 6' long with reel for each 100 chicks (to be used from the third week until the broilers are sold).
6. One hoe, one broom, and one shovel for cleaning house.
7. One lantern or other light to be used in the brooder house at night.

Selecting the Breed and Number of Chicks

Most any of the heavy breeds of chicks can be used, but White Plymouth Rocks, New Hampshire or certain cross bred chicks are suggested. If chicks are purchased or hatched at home they should be from pullorum-clean flocks. The number of chicks to be purchased should be determined by the availability of feed and size of the brooder house. Only the number of chicks that can be



Regulate the brooder, fill mash hoppers and water fountains and place clean litter on the floor before chicks are placed under the brooder.

fed and cared for properly should be started. The minimum number for this project is 100 although broods of 500 are desirable.

Do These Things Before the Baby Chicks Arrive

It is important that the club member realize that there are certain things to do before the chicks arrive and the boy or girl making these preparations in advance of the arrival of the chicks is usually rewarded with increased profits.

Repair or Build the Brooder House. The brooder house to be used should be repaired or constructed (if a new brooder house is used) well in advance of the arrival of the baby chicks. The construction of the brooder house is a very important factor in raising broilers. It should be so built that the chicks can be kept warm in cold weather and cool on extremely warm days by opening or closing ventilators in the rear of the house and the windows or curtained opening at the front. The brooder house can be a remodeled outbuilding, tobacco barn, or built out of rough lumber. If a new brooder house is built, consideration should be given to the future poultry needs and the size best suited for future developments should be selected and constructed. Regardless of the size of the house, it should be large enough to allow each chick brooded $\frac{3}{4}$ to one square foot of floor space. The brooder house should provide windows on at least three sides.

Clean the Brooder House. The brooder house and all brooding equipment should be thoroughly cleaned before it is used. This can easily be done by sweeping down the ceiling, side walls, then scrape the floor with a hoe if the brooder house is floored. Follow this by removing all loose material out of the brooder house and give the floor and side walls a thorough scrubbing with a lye water solution (one can of lye to each 10 gallons of water). Where the walls of the brooder house are constructed of concrete blocks or the floor is of concrete, the lye water should be flushed from the walls and off of the floor to prevent damage to the concrete.

Kind of Litter to Use. As soon as the floor is dry place 1" of coarse sand or 2" to 3" of shavings, crushed corn cobs, sawdust, or some other absorbent material on the floor as a litter. **Do not use moldy or musty material for litter.** The littered area used by the chicks the first four to six days should be covered with paper or sacks until the chicks have learned to eat and drink in order to discourage chicks from eating litter. Clean dry absorbent material should be added as needed. Keep a supply of dry litter on hand.

Brooders to Use. Most any type of brooder may be used provided it will furnish enough heat in cold weather—that is, a

temperature of 100 degrees F. may be had at the edge of the hover in cold weather. The thermometer should hang from the edge of the hover and the bulb of the thermometer should be on the level with the heads of the baby chicks. Start and operate the brooder three or four days before the chicks arrive in order to learn how to operate the brooder and to have it properly regulated. Infrared bulbs are now being used in the brooding of baby chicks. Detailed instruction regarding this type of brooding should be secured from your county agent.



Keep chicks warm and comfortable, but don't allow the room to get too hot. Plenty of fresh water and high grade mash are necessary to grow strong, healthy chicks.

Do These Things After Baby Chicks Arrive

When the baby chicks arrive the brooder should be properly regulated and running at the proper temperature. Litter should be on the floor. Fresh water with the chill off should be provided in founts of such construction that chicks cannot get into them. Place broiler mash and grit (chick size) in hoppers before chicks when chicks are placed under or around the brooder. Cull chicks when they are placed under or around the brooder. Kill and burn all weakly, deformed, and runty chicks. Have enough feed on hand to last three weeks.

Brooding and Feeding Instructions

Brooding Instructions. Where coal, oil, gas, wood, electric bulb or electric brooders are used they should be regulated so as to give

a temperature of 90 to 95 degrees F. at the outer edge of the hover and on a level with the chicks' heads. Where canopy or hover type brooders are used a guard 15 inches high should be placed around the brooder 36 inches from the outer edge of the hover to prevent chicks from wandering too far from the heat the first few days. This guard can be moved back each day and at the end of the second week it can be removed entirely from the house. At the end of the first week and for the next four weeks the temperature should be gradually reduced about 5 degrees a week under ordinary weather conditions; but the comfort of the chicks is a better guide than a thermometer. The brooder room should be free from drafts and kept cool by adjusting the ventilator and windows. Discontinue heat when chicks are fully feathered and no longer need heat.

Keep a light burning in the brooder house all night until broilers are sold. It should be suspended about four feet above the floor in the center of the house.

Feeding and Watering Instructions.—In order to secure the best results in feeding, it is necessary to adopt a definite feeding program and stick to it and to feed liberally of a balanced ration composed of quality ingredients. Some prefer to start chicks on baby chick scratch grains and feed this for the first one and one-half days. This is usually fed on papers and/or on top of the mash. Do not feed scratch longer than one and one-half days. Then feed liberally of a broiler mash. Where starting mashers are fed, scratch feed may be fed beginning with the sixth week. Keep feed used for broilers separate from the other poultry feed and in containers of such construction as to prevent rats from getting into it.

Provide mash hopper space at the rate of one inch for each chick for the first three weeks. Then, provide two inches a chick from the third to the sixth week and three inches per chick thereafter.

Use large size hopper after 5th week. Sink in litter if necessary.

Ample watering space is essential for maximum growth. Water should be provided for the first three weeks at the rate of three half-gallon drinking founts for each one hundred chicks brooded. After that time, provide two drinking founts of three-gallon capacity each or more for each one hundred chicks. If running water is available on the farm, an automatic water fountain may be used. Normally an automatic water fountain four feet long will provide sufficient water for four hundred broilers. Place all water founts on frames covered with $\frac{1}{2}$ " mesh hardware cloth.

Management

Management includes all the things involved in broiler production. In order to secure maximum results it is important that the chicks be given correct management during the brooding period. Good feeding, correct brooding temperature, good sanitation, dry litter and proper ventilation are good practices that will lead to success. Be a good manager and practice the following:

1. Feed at all times a liberal amount of a good balanced ration. Do not allow mash in hoppers to become musty or stale, stir it each day.
2. Keep correct brooding temperatures; don't chill or over heat chicks; follow the brooding instructions.
3. Practice rigid sanitation at all times. Wash drinking founts daily. Clean brooder house thoroughly before chicks are started. Remember there is no substitute for cleanliness in broiler production.
4. Keep the litter in the brooder house dry at all times. Start with 3" to 4" of absorbent litter on the floor. When this becomes damp or soiled, it is advisable to work and level. Then, add fresh, clean litter immediately. When conditions become very bad or the litter becomes wet, it is advisable to change. The practice of periodically stirring litter in a brooder house is not recommended.
5. Ventilation during the brooding period is very important and is one of the factors most commonly neglected by our farm people. The brooder house is properly ventilated when it is comfortable, free from drafts, moisture, and free from disagreeable odors.

Records

The main objective in keeping records is to know the true facts about the subject on which the record is kept. Unless the record is accurately kept it does not give the true facts, is misleading, and worse than no record at all.

Supplementary Information Available on Broiler Production

Extension Circular No. 154—"Common Diseases of Poultry."

Extension Circular No. 241—"The Use of Disinfectants in Poultry Production."

Extension Folder No. 57—"Homemade Electric Brooders."

Extension Folder No. 52—"The Lamp Brooder."

EXPENSE SHEET

No. baby chicks purchased..... Date purchased.....

From whom purchased..... Cost \$.....

Number chicks placed under brooder.....Date.....

Size of house used.....

Kind of litter used

INCOME SHEET

Enter record of all broilers sold, kept, or used at home at market price below.

Broilers Sold, Used or Kept

[illegible]

FEEDING AND BROODING RECORD

[illegible]

(No. of chicks dying or lost by weeks)

1st week	5th week	9th week
2d week	6th week	10th week
3d week	7th week	11th week
4th week	8th week	12th week

FINANCIAL STATEMENT OF PROJECT

(Do not fill in this sheet until the project is completed.)

INCOME:

Total value of broilers sold or used at home \$

Value of poultry manure used or sold

(Value at \$.50 per 100 lbs.)

Other income (This includes pullets and
cockerels sold or kept for breeding

purposes) \$

TOTAL INCOME \$

EXPENSES:

Cost of chicks purchased \$

Cost of litter used \$

Cost of feeding and fuel for brooding \$

Other cost \$

TOTAL COST \$

***LABOR INCOME** \$

* To get labor income subtract cost from total income.

**When project is completed and all entries made in this book,
please mail to your county or home agent.**