



4. POULTRY NO. 11—REVISED 1973
ROBERT W. BERG

Turkey Fryer-Roasters Cost of Raising Fryer-Roasters

Efficiency in production is essential for a successful turkey grower. An analysis of your production costs is necessary to show where better management will pay off. Comparing your records to a standard will help to spot your program's weak points. It may be very helpful to consider individual costs and the factors that contribute to these costs. Monthly or weekly cost comparisons can assist you in determining management problems.

The following items indicate costs per pound of turkey (live weight unless otherwise specified). A 9-pound average weight is assumed and all costs other than the one discussed remain constant.

Poult Cost: 4.9 Cents

Many factors, including the following, contribute to poult cost per pound of turkey sold:

1. Poult price.
2. Mortality and morbidity.
3. Size at market time.
4. Feed conversion.

The 4.9 cent poult cost used in this fact sheet is based on a 42 cent poult price and 5 percent mortality. A 5 cent increase in poult price means an increase of 0.56 cents in cost per pound. A 5 percent increase in mortality will increase poult cost about 0.25 cents per pound.

Size at a given age is actually rate of gain and this is usually associated with feed conversion. Both of these can be markedly influenced by genetics. Consequently, source of poults is an important factor influencing these characteristics. The larger the bird is at market time, the lower the poult cost per pound. For example, the poult cost will vary from 5.5 to 4.4 cents a pound as weight increases from 8 to 10 pounds.

A genetic improvement in rate of growth that would effect feed efficiency by 1/4 pound less feed per pound of gain reflects a value of 0.875 cents a pound difference in poult cost. This is based on a \$70 per ton feed cost.

Thus, poult cost per pound of turkey produced is a very important management factor to be considered; it is not just poult price.

Feed Cost: 11.0 Cents

Feed is the largest single expense and amounts to approximately one-half of the cost of producing birds. Many factors contribute to the feed cost, some of which follow:

1. High price of feed.
2. Poor feed quality.
3. Slow rate of gain.
4. Feed wastage.

The price of feed is a very important factor as it contributes to the cost of production. First, we must assume that feed of the same quality is being compared, or that it takes the same amount of feed per pound of gain. Under these assumptions then, every dollar increase in the price of feed per ton will add 0.15 cents additional cost per pound of turkey produced if it takes 3 pounds of feed to produce a pound of turkey. Unless these added costs can be reflected in faster gains or improved feed conversion, a turkey grower cannot really justify the added expense.

Price is not the only factor, feed quality is also very important and is usually reflected in feed conversion (number of pounds of feed it takes to produce a pound of turkey). A reduction of 1/4 pound of feed per pound of gain reflects a saving of 0.875 cents in the cost of gain. On this basis you could pay \$5 a ton more for your feed, which would increase the cost 0.75 cents, but would still leave 0.125 cents (.875 - .750 = .125) left as profit due to the extra gain.

Rate of gain and feed conversion usually go together: the faster growing birds have superior feed conversion. Rate of growth is usually considered a hatchery or genetic response, but it requires a good feed so that the poult can grow at its best possible genetic potential.

Feed wastage is a preventable loss. It contributes nothing to the growth of birds. Often there is considerable feed lost by careless handling. Feeders kept too full can result in up to 10 percent waste. Feeding rats, mice, and wild birds wastes feed and is a disease hazard. A turkey grower must control the rodents on his farm as well as the sparrows, starlings, and pigeons.

Usually the interest on the operation loan is paid with the feed bill. It is not an ingredient cost, but it is included in the feed cost as is the cost of medication that regularly comes with the prestarter and starter feeds. These items are grouped here for convenience rather than separated from the feed bill.

Medicine: 0.30 Cents

The amount of medicine used is closely associated with the type of management given a flock. A good manager can, with satisfactory conditions, raise his turkeys with very little medication. Flocks not requiring medication are healthier and grow much faster. This is one of the costs that can eat into a turkey grower's profits.

Fuel: 0.72 Cents

Fuel cost will vary greatly with the season of the year and fuel prices. Birds started in November and December require much more fuel than a flock started in April or May.

This is one expense that makes winter brooding more costly. This cost can vary from 1.70 cents to as little as 0.17 cents per pound.

Electricity: 0.20 Cents

This is also a variable cost depending on your lighting schedule, ventilation program, and the prevailing electrical rates. A windowless house requires more electricity, but it gives more uniform results because it provides environmental control, if operated properly.

Supplies: 0.71 Cents

Supplies could be called miscellaneous because this includes light bulbs, hover guards, litter, and other items. The most important item is litter. Its cost will vary greatly depending on the type used and its availability. Some growers have a good source of free litter, which only requires hauling, an item that should be included as a cost of litter. A good ventilation system with supplementary heat could increase the fuel cost but reduce the litter cost substantially.

Insurance: 0.13 Cents

Insurance is almost a must. Most turkey growers are being financed by some lending agency and most agencies require some type of insurance. Premium payments may vary, but they are a real part of the expense of raising turkeys.

Labor: 0.9 Cents

Labor is very closely associated with production volume. Where large flocks are raised and automatic equipment is installed in the buildings, one man can take care of more turkeys, which reduces labor cost per pound.

A certain amount of time should be spent in the building to determine the condition of the environment. Sometimes when automatic equipment is installed, so little time is spent in the building that it is kept too warm and ventilation is neglected. It is very important that the condition of the birds be checked several times each day.

Since labor is still a rather small cost it might be well to put more emphasis on some of the other factors. Often when labor costs are reduced, medicine and litter costs exceed the saving in labor and no saving results.

Variable costs of production in dollars

| Item | Per pound live weight | Per bird |
|----------------------|--------------------------|----------------|
| Poult | .0490 | .441 |
| Feed | .1100 | .990 |
| Medicine | .0030 | .027 |
| Fuel | .0072 | .065 |
| Electricity | .0020 | .018 |
| Insurance | .0013 | .012 |
| Supplies | .0071 | .064 |
| Labor and management | .0090 | .081 |
| Total | \$0.1886 | \$1.698 |

**Fixed costs for housing and equipment
(From Poultry Fact Sheet 10)**

All-in, all-out program (3 flocks per year)

| Item | Investment per bird | Rate (percent) | Cost per pound live weight | Cost per bird |
|---------------------------|------------------------|-------------------|----------------------------------|------------------|
| Housing | 1.00 | 10 | .011 | .10 |
| Equipment | .70 | 20 | .016 | .14 |
| Interest on investment | 1.70 | 8 | .015 | .136 |
| Taxes | | | .003 | .025 |
| Total | | | \$0.045 | \$0.401 |

Continuous program (5 flocks per year)

| Item | Investment per bird | Rate (percent) | Cost per pound live weight | Cost per bird |
|---------------------------|------------------------|-------------------|----------------------------------|------------------|
| Housing | .90 | 10 | .01 | .09 |
| Equipment | .42 | 20 | .009 | .084 |
| Interest on investment | 1.32 | 8 | .012 | .106 |
| Taxes | | | .002 | .018 |
| Total | | | \$0.033 | \$0.298 |

Costs for housing, equipment, and interest on this investment are based on calculations in Poultry Fact Sheet 10 for both methods of raising fryer-roaster turkeys. Property taxes on the growing facilities must be figured as a fixed cost of production. Taxes are quite variable due to millage rates and type and age of building. Use your own building valuation and tax rate to calculate your cost.

Careful management can reduce the operational costs as much as 10 to 15 percent. Likewise, a poor manager can increase these costs. High mortality late in the growing period can increase all these costs substantially. Mortality and morbidity are important factors influencing production costs.

Costs used as illustrations in this fact sheet reflect conditions realistically experienced by Midwest producers during recent years. Some costs, such as feed costs, may fluctuate considerably due to shortage of ingredients due to unusual demands or lean production years. When making cost estimates always use the current costs that are expected to be experienced by the producer.

This is one of a series of Poultry Fact Sheets on turkeys produced as a joint project by the University of Minnesota and the University of Wisconsin. Faculty and staff members of both institutions cooperated in the planning and production of the series.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Roland H. Abraham, Director of Agricultural Extension Service, University of Minnesota, St. Paul, Minnesota 55101. We offer our programs and facilities to all people without regard to race, creed, color, sex, or national origin.