Grower Cost of Operating a Broiler House Below Capacity

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Broiler growers generate their income from growing chickens for the broiler companies who own the birds and the feed. Broiler companies determine how often and how many chickens will be grown in each broiler house under contract. Company decisions about the flow of chicken that move through a grower's chicken house each year have a great deal of influence on the income of a contract broiler grower. The weight of birds, days without birds between flocks and the number of chickens placed in each flock all effect grower income.

A broiler house is a highly use-specific asset and must operate at capacity to maximize the fixed investment on that asset[2]. This means that if a building is designed to grow 21,000 birds per flock, any flock with fewer birds (18,000, 19,000 or 20,000 birds) is operating inefficiently. Similarly, if a loan is based on a one to two week window between flocks and the gap widens to three to four weeks, that broiler house is also not operating at capacity. Growers must meet high fixed costs from high debt levels with little margin for unplanned costs. Operating broiler houses below capacity directly affects grower income.

Broiler companies must manage the retail supply of broiler meat. Poultry companies assume all the marketing risks under contract broiler production.[3] If there is a sudden economic shock to the demand for broiler meat, the companies have to adjust their production to meet that change in demand. Companies manage their broiler meat supplies by building new houses (as demand grows) and cutting back production by reducing flock size and/or increasing time between flocks (when demand shrinks).

Target Weight of Birds. The harvest weight, or age,[4] of a bird determines the number of flocks that can be grown in a broiler house each year. Using standard broiler growth rates for a straight-run flock (males and females), assuming two weeks between flocks and a contract settlement value of $0.05 per bird, the daily income for different bird weights can be estimated.

Total wt (lbs./bird)	**4.5**	**6**	**7**
Days in house	45	55.9	62.9
Days out	14	14	14
Flocks/year	6.2	5.2	4.7
Total days out	*86.6*	*73.1*	*66.4*
Value/bird ($0.05/bird)	$ 1.39	$ 1.57	$ 1.66
Flock pop. (20,000/house)	$ 27,839	$ 31,330	$ 33,225
Income ($/house/day)	**$ 76.27**	**$ 85.84**	**$ 91.03**

[1] This paper was written while Mark Jenner was on staff with the American Farm Bureau Federation.
[2] *Are Your Grower Assets Protected Contractually?* Mark Jenner. AFBF. October 9, 2001.
[3] Growers assume new economic risks when they sign a broiler contract. These new risks just don't look like the more familiar marketing risks that are covered by the integrated poultry companies.
[4] Weights (line 1) and age (in days, line 2) in this table are directly related. This table is modified from Chapter 20, in Commercial Chicken Production Manual, by North and Bell. Van Nostrand Reinhold. 1990.

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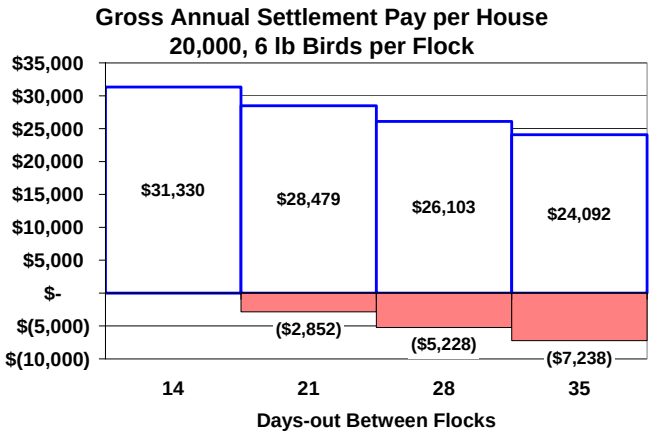
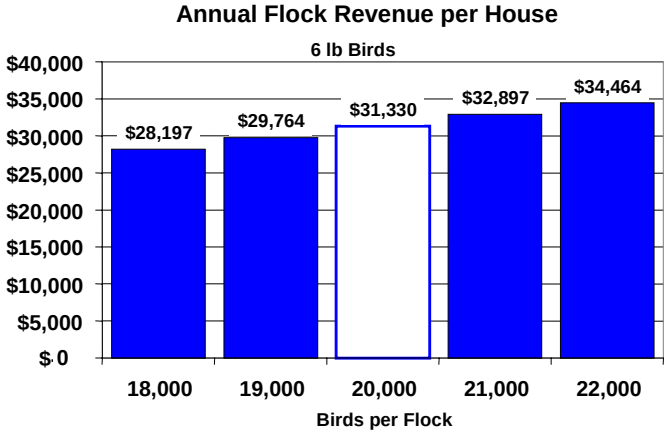
Heavier, older chickens occupy the houses longer, with less down time, than lighter, younger birds. If a company pays a higher per-pound value for a larger bird, the income per-day would increase even more for the larger birds over the smaller birds. The more days a broiler house is empty (*Total days out*, line 5 of the previous table), the less efficiently a grower is maximizing the returns from a single-use, broiler house asset.

Days-out Between Flocks. There are different reasons why houses go without chickens for extended time. That time between flocks is reported to be increasing over the last four to five years. Extending the time between flocks on average by one week, can effect a grower's income by thousands of dollars per house. If a loan was made on an expectation of 6 pound birds, with 20,000 birds per flock and a space of 14 days between flocks, the income lost by moving to 21 days between flocks is nearly $3,000 a year. If that time between flocks averages four weeks without birds, the income lost is more than $5,000. These changes are especially important if they interfere with a grower's ability to meet his/her debt obligation.



Birds per Flock. Similarly, the number of birds in each flock varies from flock to flock. A flock may be smaller because fewer chicks are delivered. A flock size may decrease over the growout due to poor chick quality or inadequate house management. Regardless of the cause of the smaller flock size, the annual revenue from the broiler house must not fall below the flock size on which the house loan is based (such as 20,000 birds per flock). Using the 6-pound bird and two weeks between flocks, an average decrease in flock size from 20,000 to 19,000 will produce a decrease in grower income of $1,500 per house. If the company cuts back on production, placing fewer chicks and in addition, a grower receives poor quality chicks, the number of chickens processed would result in additive income losses. Houses producing fewer birds will have difficulty meeting their long-term debt obligations. These income losses have little to do with contract settlement ranking.



Broiler company decisions about the flow of chickens that move through a grower's broiler house each year have a great deal of influence on the income a contract broiler grower can make.

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