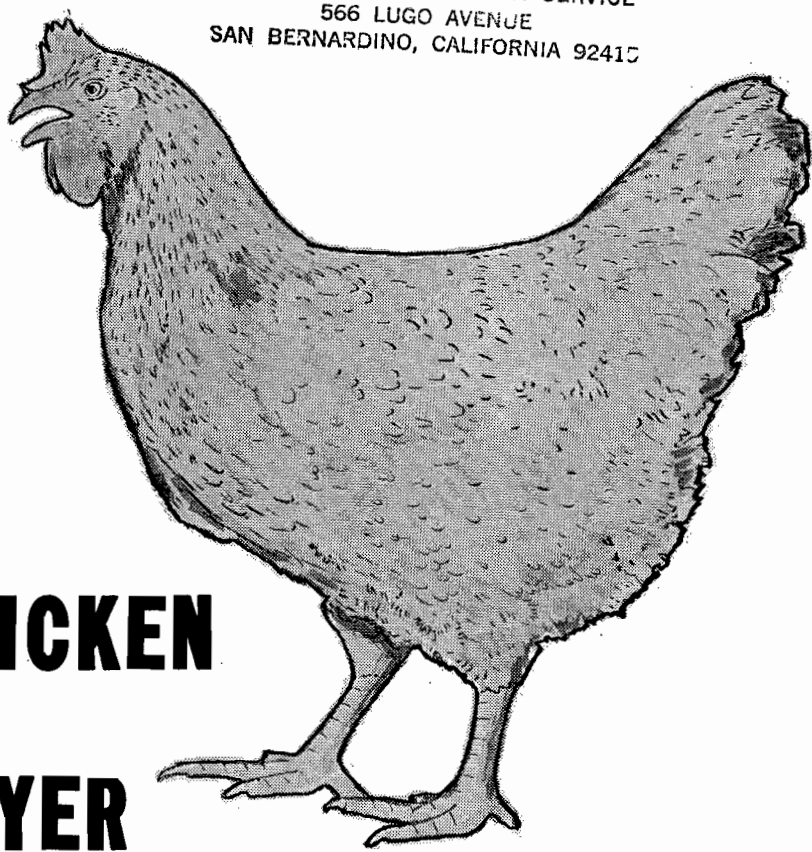


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CHICKEN FRYER PRODUCTION

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CHICKEN FRYER PRODUCTION

Fryer production in California is a specialized business, with many producers engaging in no other farming enterprise. Commercial fryer growers often raise 50,000 or more chicks at a time; most growers completely depopulate their houses between broods. This all-in, all-out system helps to prevent disease and provides a large number of fryers of the same age for high-volume processing plants. A grower can average $4\frac{1}{2}$ broods a year. The terms "fryer" and "broiler" are interchangeable.

Housing

Fryers are raised on litter in large groups with an allowance of 0.8 to 1.0 square foot of floor space per bird. For example, houses measuring 50 feet wide and 200 feet long may shelter 10,000 or more fryers, without partitions. Newer buildings are sometimes 40 feet wide, 500 feet long, and high enough so that hovers, automatic feeders, and waterers can be raised mechanically. When equipment is out of the way, it is much easier to load market-age fryers and clean with a tractor. Heat for brooding is most commonly provided by gas hover brooders with automatic controls. During cool weather, chicks need heat until 6 weeks of age; during warm weather, heat may be discontinued at the end of the third week. Fryer houses may be lighted most of the night or intermittently through the night to encourage feed consumption and induce faster growth.

Type of Chick

Growers raise crossbred chicks that have been bred especially for fast feathering, rapid growth, and meatiness. They are usually marketed when they are 8 to 9 weeks of age.

Feed

Since fryer feeds are high in both protein and energy, they are usually more expensive than chick starter mashes. However, fryer rations are more economical per pound of fryer because they give rapid growth and require relatively little feed per pound of gain. Table 1 shows slightly better than average weekly data on typical body weights and feed consumption for fryers. Most feed is handled in bulk.

TABLE 1

Broiler Growth and Feed Consumption by Weeks¹

Age in Weeks	Average Body Weight			Average Feed per Bird		Feed Conver- sion ³
	Males	Females	S.R. ²	For Period	Cumu- lative	
	Pounds					
1	.24	.23	.24	.18	-	-
2	.55	.51	.53	.38	.56	1.06
3	1.01	.90	.96	.67	1.23	1.28
4	1.54	1.32	1.43	.87	2.10	1.47
5	2.11	1.78	1.95	1.06	3.16	1.62
6	2.86	2.33	2.60	1.39	4.55	1.75
7	3.68	2.95	3.32	1.63	6.18	1.86
8	4.54	3.59	4.07	1.89	8.07	1.98

¹Adapted from *Nutrition of the Chicken* by Scott, Nesheim and Young (1969). By permission of the authors.

²S.R. = Straight Run

³Feed Conversion = Pounds of feed per pound of live chicken.

Diseases

Disease prevention and control are essential. We suggest the following practices for growers:

- Depopulate completely between broods.
- Avoid contact with other flocks.
- Start with disease-free chicks.
- Vaccinate for common diseases in the area.
- Use effective drugs in the feed to prevent coccidiosis.
- Keep feed and water clean.
- Obtain a laboratory diagnosis when disease problems arise.
- Screen houses to keep out birds and rodents.
- Allow no visitors or service people inside the poultry house unless they wear disinfected boots and clean clothing.
- Care for younger birds first if there are several ages on the ranch. (The recommended practice is to have only one age group.)

Production Costs, and Returns

In 1971, California fryer growers raised a record 89 million head compared with 87 million the previous year. Assuming that Californians ate fryer chickens at the national annual rate of (37.4 pounds dressed weight per person), only one third of the fryer chickens consumed in California in 1971 were grown here. Although California offers a great potential market for local production, competition from the Southern States has been keen and has resulted in low prices here. California average live fryer prices per pound at the ranch were: 16.9¢ in 1965; 17.8¢ in 1966; 17.2¢ in 1967; 16.6¢ in 1968; 17.3¢ in 1969; 16.7¢ in 1970; and 17.1¢ in 1971.

The estimated cost of raising fryers in California is 15.8¢ per pound (see table 2). Table 3 estimates the investment required. Because of low fryer prices, most growers raise fryers on contract with feed companies, integrators, processors, or hatcheries. Such contracts usually provide payments of 5 to 8 cents per bird raised.

Contract payments can vary with such factors as mortality, feed conversion, average weights, and profits per brood. Growers supply poultry housing, equipment, labor, and may assume some of the miscellaneous expenses. Contractors typically supply day-old chicks, feed, supervision, and many of the miscellaneous costs. To avoid misunderstandings, insist on a written agreement.

Also, fryers may be grown for processors on a floor price. Under this payment system, if the floor price is 17 cents per pound, the grower is guaranteed that amount when the market price is less than 17 cents. When the market is higher than 17 cents, he may receive the market price when the birds are ready for slaughter. The following figures project possible incomes under contract with a payment of 6.5 cents per fryer raised and with varying market prices.

Estimated Earnings per Brood of 50,000

1. Raising on Contract:

Income	
50,000 fryers raised, 6.5¢ each	\$3,250
Expenses	
Electricity and water	167
Cash overhead	223
Interest on investment	464
Depreciation	795
Total	<u>\$1,649</u>

Net Profit

Per brood, \$1,601 or \$7,205 per year with 4½ broods.

2. Raising Without a Contract:

This will obviously result in loss if the price is below 15.82¢ per pound:

Income	
At 15¢ per pound (190,000 lb)	\$28,500
Expenses	
(Table 2)	\$30,068
Subtotal (loss)	-1,568
Less farm labor on owner-operated farm	823
Net Loss	<u>-\$ 745</u>
(Per Brood)	

At higher prices, using the same method of determining cost, profits are as follows:

Price Per Pound (¢)	Profit Per Brood (\$)	Profit Per Year with 4½ Broods (\$)
16	1,155	5,198
17	3,055	13,748
18	4,955	22,298

¹ An owner-operated farm not charging for farm labor.

Commercial fryer growers in California raise fryers in large volume. Small differences in the price received or the cost of production have a great influence on the amount of profit. Notice, for example, that a change from 16 to 17 cents in the live price of fryers increases income by \$8,550, with 4½ broods per year. Also notice that feed represents roughly two-thirds of the total cost of production, exclusive of management. Thus, any change in either feed cost or feed efficiency will dramatically influence the cost of production.

Another extremely important factor is disease control. Serious disease problems will result in fewer fryers to sell, reduced average weight at marketing, and an increase in the amount of feed required per pound of fryer. Disease control can make the difference between success and failure.

In conclusion, success depends on a satisfactory contract or reasonable fryer prices, efficiency of production, and volume.

TABLE 2

Estimated Costs of Raising 50,000 Chicken Fryers

Cost Items	Per Brood (50,000)	Per Bird	Per Pound (190,000#)
	(\$)	(¢)	(¢)
Feed*—228 tons @ \$90 per ton	19,665	39.33	10.35
Chicks—52,360 @ \$0.12 each, allowing for 5% mortality	6,316	12.63	3.32
Fuel—\$0.01 per chick started	526	1.05	0.28
Litter—\$500 ÷ 4.5, com- plete change once a year	111	0.22	0.06
Health and Sanitation— \$0.01 per bird raised	500	1.00	0.26
Electricity and Water	167	0.33	0.09
Interest on Feed— \$1 per ton	228	0.46	0.12
Miscellaneous—phone, travel, interest on chicks, etc	250	0.50	0.13
Subtotal—Feed and Supplies	27,763	55.52	14.61
Cash Overhead Costs— taxes, repairs, insurance	223	0.45	0.12
Total Labor—470 hours @\$1.75 per hour	823	1.65	0.43
Subtotal— All Cash Costs	28,809	57.38	15.16
Non-Cash Costs**			
Interest on Investment	464	0.93	0.24
Depreciation	795	1.59	0.42
TOTAL COST (except management)	30,068	59.90	15.82

*Assuming 2.3 pounds of feed per pound live weight, average body weight of 3.8 pounds.

**Based on 4.5 broods per year – see table 3 for details.

E 3
Estimated Investment Cost for Raising 50,000 Chicken Fryers

	Original Cost	Average Value	7% Interest on Average Value	Life	Depreciation
House @ 70¢/square foot 5, each 50' x 200'	\$ 35,000	\$ 17,500	\$ 1,225	20	\$ 1,750
Mechanical feeders 2'' feeder space per fryer	9,000	4,500	315	10	900
Gas brooders @ \$50 70 (14 per house)	3,500	1,750	122	15	233
Waterers @ \$11 70 (14 per house), each 8'	770	385	27	5	154
Bulk storage tanks @ \$400 5, each 7.5 tons	2,000	1,000	70	25	80
Chick feeders @ \$1.50 600, each 3'	900	450	32	7	129
Miscellaneous: tools, etc.	1,000	500	35	3	333
Land, 5 acres @ \$750	3,750	3,750	263	--	--
TOTAL	\$ 55,920	\$ 29,835	\$ 2,089*		\$ 3,579**

\$2,089 ÷ 4.5 = \$464 interest per brood

**\$3,579 ÷ 4.5 = \$795 depreciation per brood

Suggestions for Further Reading

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