

# Oregon Agricultural College Extension Service

PAUL V. MARIS

Director

---

Cooperative Extension Work in Agriculture and Home Economics  
Oregon Agricultural College and United States Department of Agriculture, Cooperating  
Printed and distributed in furtherance of the Acts of Congress of  
May 8 and June 30, 1914

---

## Cost of Rearing Pullets to Six Months of Age

By

FRED H. COCKELL,

Field Instructor in Poultry Husbandry

The data herein published were gathered during the season of 1923 to determine, if possible, more accurate figures than were at that time



Ideal growing conditions

available on the cost of raising pullets in a commercial flock in Oregon. The data were secured from five different farms in separate communities within a thirty-mile radius of Portland. On four of the farms the only

poultry fed was the chicks being raised. On the fifth farm some laying stock was kept, but special provisions were made to keep feeds used for old and young stock separate. All feeds used were checked over weekly by the writer, and supervision given the management of growing pullets during the entire six months. No account was taken of investment or labor in these computations.

The flocks were brooded in units of from 300 to 400 chicks by the colony house system of brooding. The houses varied in size from 8 feet by 10 feet to 9 feet by 12 feet. With the exception of 1200, all were brooded in a home-constructed brooder, heated by means of a blue flame oil heater which forced hot air through stovepipes. Coal stoves were used for the other 1200.

### NUMBER OF CHICKS BROODED

On the five farms 6291 chicks were brooded, distributed as follows:

Farm No. 1.....	1066
Farm No. 2.....	1146
Farm No. 3.....	1467
Farm No. 4.....	1439
Farm No. 5.....	1173

### FEEDING METHOD AND MANAGEMENT

Identical methods of feeding and management were used on each farm, as follows:

**First week.** Chick grain was fed five times a day, 7 a.m., 9:30 a.m., 12 noon, 2:30 p.m., and 6 p.m. Grit and charcoal mixed in with grain, and milk only used to drink.

**Second week.** Chick grain was fed only three times a day, 7 a.m., 12 noon, and 6 p.m. Dry mash was fed in place of the 9:30 a.m. and 2:30 p.m. grain feed. This was kept before them for only 20 minutes at each feeding during the second week, after which the length of time the mash was kept before them was increased, so that by the fifth week it was before them two hours in the morning and two hours in the afternoon.

Milk alone was used as a drink until the chicks were four weeks of age, after which time both water and milk were before them until the broilers were disposed of. From the fifth week until the time the broilers were sold, which was between the ninth and twelfth week, grain was fed three times daily and mash was before them two hours in the morning and two hours in the afternoon.

During the second week the chicks were taught to go outdoors, and from that time were encouraged to be outdoors as much as possible. If weather permitted, mash was always fed outdoors after they were four weeks of age. Small yards were used for runs until the chicks were

about six weeks of age, after which they were given as much range as possible, which varied from  $1\frac{1}{2}$  acres to  $2\frac{1}{2}$  acres per farm flock. Chicks were taught to roost as soon as possible, and sufficient roosting space was always provided to prevent crowding. After they were three months of age they were allowed to roost in trees or brush, as was available on their range. From the time cockerels were disposed of as broilers until pullets were put in the laying house, grain was fed only twice a day, morning and night, and enough mash put in hoppers between 9 and 10 a.m. to last until 2 p.m. During late summer, kale was fed for green feed. As all brooding was done on sod, sufficient green feed was secured from their range until early summer.

### RATIONS USED

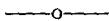
Commercial chick grains were used until chicks were large enough to eat whole wheat and cracked corn, and then the grain ration consisted of equal parts of wheat and corn. Commercial chick mash was used until the chicks were six weeks old, and one flock was fed commercial growing mash during the entire growing period. The other four flocks used the following growing mash:

3 sacks of mill-run.....	240 lbs.	Where milk was fed, meat meal was omitted after pullets were 12 weeks of age.
1 sack of corn meal.....	100 lbs.	
1 sack of ground oats.....	100 lbs.	
1 sack of middlings.....	90 lbs.	
$\frac{1}{4}$ sack of bone meal.....	25 lbs.	
$\frac{1}{4}$ sack of meat meal.....	25 lbs.	

### MORTALITY

The mortality of each flock to eight weeks of age was:

Flock	No. 1	No. 2	No. 3	No. 4	No. 5	Average
At 8 weeks of age.....	5%—	5%—	5%	23%—	17%—	11%
At 6 months of age.....	7 $\frac{1}{2}$ %	10%+	10%+	33%—	22%+	17%+



### TOTAL ACCOUNTING FOR ALL CHICKS BROODED

Number of chicks put in brooder.....	6291
Pullets raised .....	2573
Broilers sold at 5 weeks.....	300
Broilers sold after 8 weeks.....	2154
Cull pullets sold .....	63
Consumed for home use.....	124
Total mortality and missing.....	1077
	6291

## COST OF CHICKS

The average cost of all chicks put in brooder was 15c each. This was because on each farm one incubator of 500 eggs was set and brought off the same time as other chicks were purchased, and to the cost of the chicks purchased was added the cost of hatching eggs, and fuel used for incubation.

### SUMMARY OF COST OF REARING CHICKS FIRST EIGHT WEEKS

	Amount	Cost	Average cost
Number of chicks put in brooders.....	6291	\$932.14	\$0.15 per chick
Feed consumed:			
Grain .....	9847 lbs.	\$280.06	\$2.85 per 100 lbs.
Mash .....	8469 lbs.	211.48	2.50 per 100 lbs.
Milk .....	1638 gal.	63.00	0.04 per gal.
Grit .....	155 lbs.	2.33	
Charcoal .....	120 lbs.	4.70	
Other items:			
Straw for litter.....	2662 lbs.	\$ 20.84	
Oil for brooding.....	560 gal.	109.40	\$0.20 per gal.
Coal for brooding.....	2800 lbs.	31.10	20.20 per ton
Disinfectant, etc. ....		10.40	
Total cost, first eight weeks.....		\$1665.45	\$0.297 per chick*

\*Computed on basis of 5600 chicks after deducting mortality of 691, or 11 percent, the cost items being distributed as follows:

Initial cost per chick.....	\$0.150
Loss through mortality per chick.....	.016
Cost of feed per chick.....	.090
Cost of fuel per chick.....	.025
Cost of milk per chick.....	.012
Cost of litter and miscellaneous per chick.....	.004
Total cost at eight weeks.....	\$0.297

#### Returns from broilers sold:

300 sold at five weeks @ 10c.....	\$ 30.00
2154 sold after eight weeks @ 32c average.....	703.34
Total .....	\$733.34

### SUMMARY OF COSTS FOR 2573 PULLETS FOR SIX MONTHS

	Amount	Cost	Average cost
Cost of original 6291 chicks.....		\$ 932.14	\$0.15 per chick
Feed consumed:			
Grain .....	43047 lbs.	1033.64	2.40+ per cwt.
Mash .....	34698 lbs.	804.34	2.32 per cwt.
Milk .....	3427 gal.	124.48	0.04 per gal.
Grit, shell, charcoal.....		28.30	
Other costs:			
Litter .....	4212 lbs.	34.69	
Sand .....		2.50	
Oil for fuel.....	600 gal.	117.40	
Coal for fuel.....	2800 lbs.	31.10	
Disinfectant, etc. ....		19.65	
Total cost for 2,573 pullets at six months, including feed for broilers .....		\$3128.24	\$1.22 per pullet
Income from broilers and cull pullets.....		763.34	
Total cost less income from broilers and culls.....		\$2364.90	0.92 per pullet
Income from eggs laid before six months.....		303.69	
Net cost less income from broilers, culls, and eggs....		\$2061.21	0.80 per pullet

Total mortality and missing to six months of age, 1077 or 17 percent.

For purposes of comparison where chicks cost more than 15c each, for each cent over 15c add \$0.0112 to the cost of each chick at eight weeks of age, and \$0.0244 to total cost of each pullet given in the tables. For example, if chicks cost 20c each, add 5 × \$0.0112 or \$0.056 to the average cost at eight weeks and 5 × \$0.0244 or \$0.122 to the average cost of pullets at six months. If average feed costs are greater than those in the tables add \$0.015 per pullet for each \$1.00 per ton more.