



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Poultry -

Cost of production as



NORTH OF SCOTLAND COLLEGE OF AGRICULTURE

School of Agriculture, Aberdeen

Agricultural Economics Department

GIANNINI FOUNDATION OF
AGRICULTURAL ECONOMICS
LIBRARY

WITHDRAWN
AUG 4 1965

**Cost of Rearing Birds to
Point-of-Lay in the
North-East of Scotland
1963/64**

by Audrey M. Chalmers, B.Sc.

May, 1965

Economic Report No. 112

Price 3/-

ACKNOWLEDGMENT

The Department of Agricultural Economics, North of Scotland College of Agriculture, wishes to thank those farmers and their wives who supplied physical and financial records for this Report. Thanks are also extended to the College Poultry Advisers for assistance in the collection of data.

THE
NORTH OF SCOTLAND COLLEGE OF AGRICULTURE

*With the Compliments of the
Agricultural Economics Department*

41½ UNION STREET,
ABERDEEN.

THE NORTH OF SCOTLAND COLLEGE OF AGRICULTURE

AGRICULTURAL ECONOMICS DEPARTMENT

COSTS OF REARING BIRDS TO POINT-OF-LAY

IN THE NORTH-EAST OF SCOTLAND

1963/64

by

Audrey M. Chalmers . B.Sc.

May, 1965

COSTS OF REARING BIRDS TO POINT-OF-LAY IN
THE NORTH-EAST OF SCOTLAND 1963/64

Contents

	<u>Page</u>
INTRODUCTION	1
The Sample	1
<u>CHICKS PURCHASED AT DAY-OLD</u>	2
Brooding	2
Size of Batch	2
Time of Purchase	3 - 4
Cost of Rearing from Day-Old to Point-of-Lay	5
Cost of Chick	6
Cost of Food	6 - 7
Labour	8
Credits	8
Range of Costs	8
Mortality	9
<u>BIRDS PURCHASED AT STAGES LATER THAN DAY-OLD</u>	10
Cost of Young Bird	10
Food	11
Equipment Depreciation	11
Appendix Tables	12 - 13
Method of Costing and Standards Used	13

List of Tables

	<u>Page</u>
Table I Number of Batches and Birds Reared, including Age at Purchase and Type	2
II Type of Brooders Used and Average Size of Batch	2
III Frequency Distribution of Batches by Size with Average Cost to Point-of-Lay	3
IV Frequency Distribution of 49 Medium and Light Batches by Month of Purchase and Month reaching Point-of-Lay: Commercial Egg Flocks	4
V Seasonal Patterns of Chick Intake for own Laying Flock	4
VI Average Costs per Bird Reared: Day-Old to Point-of-Lay	5
VII Influence of Size of Batch on Costs	7
VIII Frequency Distribution of Batches by Food Consumed per Bird	7
IX Frequency Distribution of Batches by Cost per Bird to Point-of-Lay	8
X Frequency Distribution of Batches by Cost per Bird to Point-of-Lay excluding Charges for Labour and Overheads	9
XI Frequency Distribution of Batches by Percentage Mortality	9
XII Average Costs Per Bird Reared: Ages older than Day-Old to Point-of-Lay	10
<u>Appendix</u>	12 - 13
Table A Average Cost Per Bird Reared: Day-Old to Point-of-Lay - Medium Birds for Commercial Egg Production:	12
27 Medium Batches	
3 High Cost Batches	
3 Low Cost Batches	
Table B Average Cost Per Bird Reared: Day-Old to Point-of-Lay - Light Birds for Commercial Egg Production:	12
22 Light Batches	
3 High Cost Batches	
3 Low Cost Batches	
Table C Average Cost Per Bird Reared: Day-Old to Point-of-Lay - Birds for Hatchery Supply:	13
10 Breeding Batches	
8 Heavy Batches	
2 Light Batches	

COSTS OF REARING TO POINT-OF-LAY

INTRODUCTION

With egg prices falling annually, it is becoming increasingly important that commercial and hatching egg producers should have a complete knowledge of the financial state of their egg production enterprise. Food constitutes nearly 60 per cent of costs in egg production; the second highest cost item, standing at approximately 20 per cent, is the figure for bird depreciation. For the purpose of this Report, bird depreciation may be defined as the difference between cost at point-of-lay and cull price. Rearing costs to point-of-lay, therefore, play a vital part in the economics of egg production, and the cost of the young pullet at point-of-lay is of paramount importance to the profitability of the egg production unit. The bird must be reared at a reasonable cost if the figure for bird depreciation is to be kept to a minimum. But at what age is the bird reckoned as being at point-of-lay? This will depend upon (a) breed (b) management during the rearing period. Also, age at point-of-lay can be delayed or advanced according to feeding and environment. In the main, birds in the sample covered in this investigation were costed from date of purchase, either at day-old or older, to the point when they were up to 5 per cent production, and were called "at point-of-lay" at around 20 weeks of age. Subsequently the birds were used for commercial egg production or for the production of hatching eggs.

The Sample - With a view to finding out the cost of rearing their birds to point-of-lay, 58 farmers provided physical and financial data relating to 68 batches of young birds. Of these birds, 59 batches were bought at day-old, 10 of these comprising birds which would eventually produce hatching eggs. The remaining 9 batches were purchased at an older stage. Formation of the sample, covering over 40,000 birds reared, is shown in Table I.

TABLE I
Number of Batches and Birds Reared, including Age at Purchase and Type

Batches			Age at Purchase	Birds Reared		Type of Birds
Type	No.	%		No.	%	
Commercial Egg	27	39.7	Day-Old	9,734	24.0	Medium Hybrids and Crosses Light Hybrids Medium and Light Hybrids Medium and Light Hybrids Medium and Light Hybrids
" "	22	32.4	Day-Old	10,778	26.6	
Hatching "	10	14.7	Day-Old	12,431	30.6	
Commercial "	4	5.9	9-12 wks.	2,650	6.5	
" "	5	7.3	16-18 wks.	4,994	12.3	
	68	100.0		40,587	100.0	

Ten varieties of modern hybrids and four traditional medium-type crosses were represented in the sample. None of the units was a specialist poultry farm - all these birds were reared on general farms as replacements for commercial egg production enterprises or for supplying hatching eggs as the major sale product.

CHICKS PURCHASED AT DAY-OLD

Brooding - Brooding of chicks purchased at day-old was done in gas, electric and paraffin brooders as shown in Table II.

TABLE II
Type of Brooders Used and Average Size of Batch

Type of Brooder	No. of Batches	Av. Size of Batch
Gas	15	1,250
Electric	28	460
Gas and Electric	3	1,520
Paraffin	13	220
Total	59	625

A marked preference for electric brooders was shown where medium-size batches of birds were being reared, but gas appeared to be chosen on these units where batches were larger. Smaller poultry units requiring comparatively few laying replacements still remained faithful to the older paraffin brooders, making up nearly 25 per cent of the sample.

Size of Batch - Chicks were purchased in numbers ranging from 100 to 2,500 with the frequency shown in Table III.

TABLE III

Frequency Distribution of Batches by size with
Average Cost to Point-of-Lay

No. in Batch	No. of Batches	%	Average Cost to Point-of-Lay
			£ s. d.
150 and under	11	18.6	-:16: -
151 - 200	7	11.9	-:14: 9
201 - 300	16	27.1	-:14: 1
301 - 400	2	3.4	-:14: 10
401 - 500	2	3.4	-:12: 5
501 - 600	4	6.8	-:13: 1
601 - 700	-	-	-: -: -
701 - 800	2	3.4	-:12: 7
801 - 900	-	-	-: -: -
901 - 1,000	1	1.7	-:12: 3
Over 1,000	14	23.7	-:13: 9
	59	100.0	

The largest batches were those purchased, in the main, by hatchery suppliers, but the largest percentage of the sample comprised birds which were being reared as replacements for commercial egg production enterprises.

Time of Purchase - Day-old chicks were purchased in each month throughout the year. No chicks which were to become commercial egg producers, however, were purchased in July as the following Table IV demonstrates. As a result, birds were coming into lay every month except January. Only those birds reaching point-of-lay from July onwards would have had, therefore, peak production during the months when egg prices were at their highest, viz. from August to December, and thus maximised profitability during their productive lives in the laying flock. Time of hatch is not so important for the hatchery suppliers as hatching egg prices fluctuate less.

TABLE IV

Frequency Distribution of 49 Medium and Light Batches by
Month of Purchase and Month reaching Point-of-Lay
Commercial Egg Flocks

Month of Purchase	No. of Batches	%	Month reaching Point-of-Lay	No. of Batches	%
September, 1963	4	8.2			
October	7	14.3			
November	3	6.1			
December	6	12.3			
January, 1964	6	12.3	January, 1964	-	-
February	8	16.3	February	4	8.2
March	7	14.3	March	6	12.2
April	4	8.2	April	7	14.3
May	2	4.0	May	4	8.2
June	1	2.0	June	5	10.2
July	-	-	July	8	16.2
August	1	2.0	August	7	14.3
			September	3	6.1
			October	3	6.1
			November	1	2.1
			December	1	2.1
	49	100.0		49	100.0

In the Producer Survey of U.K. Commercial Flocks, October, 1963 - September, 1964, the British Egg Marketing Board provides a picture of the seasonal patterns of chick intake for the last four years. These are shown in Table V, and demonstrate "how the seasonal pattern of chick intake has changed over the years with decreases in the proportions from about December to April, and relative increases from about May to September."

TABLE V

Seasonal Patterns of Chick Intake for own Laying Flock*

Period of intake as day-old chicks for rearing for own laying flock	1960/61 %	1961/62 %	1962/63 %	1963/64 %
Mid-Sept. to Mid-Oct.	3	4½	4	6
Mid-Oct. to Mid-Nov.	5½	5½	6	7
Mid-Nov. to Mid-Dec.	7	8	6	6½
Mid-Dec. to Mid-Jan.	10	8	8	7½
Mid-Jan. to Mid-Feb.	14	11	10	9½
Mid-Feb. to Mid-Mar.	19	13½	11	15
Mid-Mar. to Mid-Apr.	16	14½	13	12½
Mid-Apr. to Mid-May	9	10½	12	9½
Mid-May to Mid-June	6½	8	11	9½
Mid-June to Mid-July	3½	6	7	6
Mid-July to Mid-Aug.	3	5½	5½	5
Mid-Aug. to Mid-Sept.	3½	5	6½	6
Twelve monthly period Mid-Sept. to Mid-Sept.	100	100	100	100

*British Egg Marketing Board - Final Report on Producer Survey October, 1963 - September, 1964: U.K. Commercial Flocks.

Cost of Rearing from Day-Old to Point-of-Lay - The average cost of rearing pullets from day-old to point-of-lay is shown in Table VI. Birds reared in the hatchery supply group include cockerels as well as pullets.

Tables on pages 12 and 13 (Appendix) provide costs per bird reared, and, at the same time, comparison is made between high and low cost birds of light type, also between high and low cost birds of medium type. Figures are also given for 8 batches of heavy-type birds and 2 batches of light-type birds being reared for the production of hatching eggs. Reasons for differences are discussed throughout the Report under relevant headings.

TABLE VI
Average Costs Per Bird Reared: Day-Old to Point-of-Lay

Item	Average - 27 Medium Batches	Average - 22 Light Batches	Average 49 Batches	%	Average 10 Batches for Hatchery Supply	%
	s. d.	s. d.	s. d.		s. d.	
Cost of Chick	3:10	3:10	3:10	26.6	3: 3	21.8
Food	7: 7	7: 2	7: 5	51.5	9: 8	64.8
Equip. Deprcn.	-: 2	-: 2	-: 2	1.1	-: 4	2.2
Heating	-: 2	-: 3	-: 3	1.8	-: 2	1.1
Miscellaneous	-: 1	-: -	-: -	-	-: 1	0.6
Cost excluding Labour & Over- heads	11:10	11: 5	11: 8	81.0	13: 6	90.5
Labour	2: 1	1: 8	1:11	13.2	-:11	6.1
Overheads	-:11	-: 9	-:10	5.8	-: 6	3.4
Less Credits	14:10 -: 1	13:10 -: -	14: 5 -: -	100.0	14:11 -: 5	100.0
COST TO POINT-OF- LAY	14: 9	13:10	14: 5		14: 6	
Food consumed - lbs.	25.08	23.37	24.30		32.58	
Purchased Food as % of Ration	83.2	79.2	81.2		74.2	
Average Cost of Purchased Food per cwt.	36s. 7d.	37s. 0d.	36s. 9d.		37s. 9d.	
Average Cost of all Food per cwt.	33s. 8d.	34s. 3d.	33s. 11d.		33s. 7d.	
Average Age at Point-of-Lay	20 wks. 4 days	20 wks. 5 days	20 wks. 4 days		22 wks. 5 days	
Mortality %	5.6	5.2	5.4		5.5	
Labour - Hours per bird	0.50	0.40	0.45		0.22	
Average Number reared	360	490	419		1,243	

Cost of Chick - The average day-old chick cost per bird reared is the same in the medium and light groups, but lower in the hatchery supply group. This is mainly due to the fact that these latter farms bought very much larger numbers of birds and so enjoyed discounts and lowered prices because of size of order. Also, cockerels are often included free and so reduce the cost. The cost of the chick at 3s. 10d. is higher than last year's figure by 5d., although the overall cost at point-of-lay is exactly the same. This is the result of a higher incidence of modern hybrids in the sample and a slightly higher average mortality figure. Cost per chick ranged from 2s. 4d. per chick (flock of traditional crosses) to 5s. 4d. (flock of modern light hybrids with a very high mortality figure of over 18 per cent). It is stressed that this "cost of chick" is not the purchase price of the day-old chick, but the purchase price divided by number of birds reared.

Cost of Food - This cost, as in all forms of livestock production, is the highest cost factor constituting over 50 per cent of total cost in the commercial egg production birds and nearly 65 per cent in the hatchery supply group. The high food consumption in the latter group is due to the fact that the birds reared include cockerels; they are more voracious eaters than the smaller pullets and the number of cockerels to be reared is dictated by the hatcheries.

Of the 49 batches being reared for commercial egg production, 13 were fed no oats at all during the rearing period and relied solely on purchased food. Four farmers mixed some or all of their own growers' ration, thereby reducing the overall cost of food to 30s. 8d. per cwt. Three of these four reared between one and three thousand birds, so the economy was worthwhile and was the main reason for their resultant low figure of 11s. 1d. per bird at point-of-lay. Only 1 of the 10 breeding flocks used no oats at all.

The importance of food consumption per bird and its cost is indicated clearly when comparing the average figures of the highest and lowest flocks in the Appendix Tables (Pages 12 & 13).

In the main, the average cost to point-of-lay decreases as size of batch increases as labour, overhead charges, etc., are spread over a greater number of birds. This is clearly seen in Table VII where batches of birds being reared for commercial egg production are tabulated according to size.

TABLE VII
Influence of Size of Batch on Costs

No. in Batch	Batches		Average Cost to Point-of-Lay
	No.	%	
Under 500	37	75.5	14s. 10d.
500 - 999	7	14.3	12s. 5d.
1,000 and over	5	10.2	12s. 3d.
	49	100	

Table VIII shows the frequency distribution of flocks by food consumed per bird in lbs.

TABLE VIII
Frequency Distribution of Batches by Food Consumed Per Bird

Food Consumed lbs.	Medium Birds		Light Birds		Breeding	
	No. of Batches	%	No. of Batches	%	No. of Batches	%
18 and under	-	-	3	13.6	-	-
18.1 - 20	4	14.8	5	22.7	-	-
20.1 - 22	2	7.4	1	4.5	1	10
22.1 - 24	5	18.5	3	13.6	1	10
24.1 - 26	5	18.5	4	18.2	-	-
26.1 - 28	4	14.8	-	-	1	10
28.1 - 30	3	11.2	4	18.2	-	-
30.1 - 32	2	7.4	1	4.6	1	10
Over 32	2	7.4	1	4.6	6	60
	27	100.0	22	100.0	10	100

Labour - All labour expended on these units was unpaid family labour. The cost of the light-type birds, even before the addition of labour and overhead charges, shows an advantage of 5d. per bird over the medium-size birds at this stage. Labour charges are higher on the latter because the figure was spread over a smaller number of birds reared. The hatchery supply flocks show to advantage in respect of labour charges because of the greater number of birds reared per batch.

Credits - These are for birds sold or consumed during the rearing period or the first few eggs produced.

Range of Costs - The range of total costs per bird to point-of-lay was wide and is illustrated in Table IX.

TABLE IX
Frequency Distribution of Batches by Cost Per
Bird to Point-of-Lay

Cost to Point-of-Lay	Medium Birds		Light Birds		Breeding	
	No. of Batches	%	No. of Batches	%	No. of Batches	%
11s. and under	-	-	3	13.6	-	-
11s. 1d. - 12s.	5	18.5	3	13.6	-	-
12s. 1d. - 13s.	2	7.4	3	13.6	2	20.0
13s. 1d. - 14s.	4	14.8	5	22.8	1	10.0
14s. 1d. - 15s.	6	22.3	3	13.6	2	20.0
15s. 1d. - 16s.	4	14.8	-	-	5	50.0
16s. 1d. - 17s.	3	11.1	3	13.6	-	-
17s. 1d. - 18s.	1	3.7	1	4.6	-	-
Over 18s.	2	7.4	1	4.6	-	-
	27	100.0	22	100.0	10	100.0

Cost per bird ranged from 10s. 3d. (light hybrid) to 20s. 9d. (two batches - one light hybrid and one medium hybrid). These high cost birds were the result of high food consumption per bird combined with, in one case, high mortality and in the other, a high labour charge.

As labour was unpaid, the next table (Table X) gives the frequency distribution of cost per bird when labour charges and arbitrary charges for overheads are discounted.

TABLE X

Frequency Distribution of Batches by Cost Per Bird to Point-of-Lay
excluding Charges for Labour and Overheads

Cost to Point-of-Lay	Medium Birds		Light Birds		Breeding	
	No. of Batches	%	No. of Batches	%	No. of Batches	%
11s. and under	8	29.6	10	45.4	1	10.0
11s. 1d. - 12s.	4	14.8	6	27.3	1	10.0
12s. 1d. - 13s.	10	37.1	2	9.1	2	20.0
13s. 1d. - 14s.	5	18.5	-	-	3	30.0
14s. 1d. - 15s.	-	-	2	9.1	3	30.0
15s. 1d. - 16s.	-	-	-	-	-	-
16s. 1d. - 17s.	-	-	2	9.1	-	-
	27	100.0	22	100.0	10	100.0

Mortality - This figure is extremely important if cost to point-of-lay is to be kept as low as possible. It is calculated by taking the difference between the number of chicks purchased and birds reared, and expressing this as a percentage of chicks purchased. The range of mortality in the sample is shown in Table XI.

TABLE XI

Frequency Distribution of Batches by
Percentage Mortality

Mortality %	No. of Batches				%
	Medium Birds	Light Birds	Breeding	Total	
0 - 2	8	6	-	14	23.7
2 - 4	4	5	4	13	22.0
4 - 6	6	4	3	13	22.0
6 - 8	3	3	-	6	10.2
8 - 10	2	1	2	5	8.5
10 - 12	1	1	1	3	5.1
Over 12	3	2	-	5	8.5
	27	22	10	59	100.0

Mortality percentage ranged from nil in three batches to just under 20 per cent. The accuracy of this figure is debatable as extra chicks are usually included in orders and, as a result, mortality on the average may be under-estimated.

BIRDS PURCHASED AT STAGES LATER THAN DAY-OLD

Four Farmers purchased birds at ages ranging from 9 to 12 weeks; one of these batches consisted of medium-type hybrids and three of light-type hybrids. Five flockowners procured their replacement laying stock at 16 to 18 weeks; this group was made up of 1 medium hybrid batch and 4 containing light hybrids. Table XII shows the cost of rearing these birds to point-of-lay.

TABLE XII
Average Costs per Bird Reared:
Ages older than Day-Old to Point-of-Lay

Item	Purchased at 9-12 weeks		Purchased at 16-18 weeks	
	Average 4 Batches		Average 5 Batches	
	s. d.	%	s. d.	%
Cost of Young Bird	10: -	65.9	14:10	82.0
Food	4: 7	30.2	2:10	15.7
Cost excluding Labour & Overheads	14: 7	96.1	17: 8	97.7
Labour	-: 4	2.2	-: 3	1.4
Overheads	-: 3	1.7	-: 2	0.9
Less Credits	15: 2 -: 1	100.0	18: 1 -: 2	100.0
COST TO POINT-OF-LAY	15: 1		17:11	
Food consumed - lbs.	13.9		9.2	
Food Purchased as % Ration	100.0		100.0	
Average cost of all Food per cwt.	36s. 3d.		36s. 0d.	
Average Age at Point-of-Lay	20 wks. 2 days		22 wks. 5 days	
Mortality %	0.8		0.5	
Labour - Hours per bird	0.08		0.05	
Average Number reared	662		999	

Cost of Young Bird - When purchasing birds at these older stages, the cost structure changes completely and the greatest cost item now becomes the cost of the young bird with food cost a very much reduced figure. It is more economic, generally speaking, to rear one's own replacements. If, however, space and time are limiting factors, then the purchase of older birds can be an advantage, particularly if a large number of replacements is required.

Food - In each of the 9 batches purchased at stages later than day-old, only purchased food was used with no farmer feeding grain. As a result, the average cost of all food was 36s. 1d. per cwt. compared with 33s. 11d. per cwt. which was the average cost of all food for birds purchased at day-old.

Equipment Depreciation - No charge for equipment depreciation was made as, in the group where birds were purchased at 9-12 weeks, the young stock was placed in houses which had been written off. In the group where birds were purchased at 16-18 weeks, the birds were placed in laying quarters at once and made no use of rearing equipment.

In the North-East of Scotland, the cost of buying replacements at point-of-lay (20 weeks of age) is generally reckoned to be about 19s. per bird. On average, the farms considered in this Report reared replacements to point-of-lay for 14s. 5d. per bird - about 4s. 6d. or 24 per cent below the probable purchase price. In these circumstances, home-rearing may be justified. Also, with profitability in egg production diminishing annually, the egg producer requires the rearer's profit to supplement the meagre pickings provided by his egg production unit.

APPENDIX

Table A

Average Cost per Bird Reared: Day-Old to Point-of-Lay

Medium Birds - 27 Batches for Commercial Egg Production

Item	Average - 27 Batches		Average 3 High Cost Batches	Average 3 Low Cost Batches
	s. d.	%	s. d.	s. d.
Cost of Chick	3:10	25.8	4: 1	3: 2
Food	7: 7	51.2	8: 9	6: 6
Equipment Depreciation	-: 2	1.1	-: 1	-: 2
Heating	-: 2	1.1	-: 2	-: 3
Miscellaneous	-: 1	0.6	-: -	-: -
Cost excluding Labour & Overheads	11:10	79.8	13: 1	10: 1
Labour	2: 1	14.1	3: 2	1: 1
Overheads	-:11	6.1	1: 4	-: 6
Less Credits	14:10 -: 1	100.0	17: 7 -: -	11: 8 -: -
COST TO POINT-OF-LAY	14: 9		17: 7	11: 8
Food consumed - lbs.	25.08		29.09	22.91
Purchased Food as % of Ration	83.2		82.4	86.4
Average Cost of Purchased Food per cwt.	36s. 7d.		36s. 6d.	35s. 9d.
Average Cost of all Food per cwt.	33s. 8d.		34s. 0d.	32s. 0d.
Average Age at Point-of-Lay	20 wks. 4 days		19 wks. 4 days	20 wks. 5 days
Mortality %	5.6		5.2	2.5
Labour - Hours per bird	0.50		0.76	0.25
Average Number reared	360		186	390

Table B

Average Cost Per Bird Reared: Day-Old to Point-of-Lay

Light Birds - 22 Batches for Commercial Egg Production

Item	Average - 22 Batches		Average 3 High Cost Batches	Average 3 Low Cost Batches
	s. d.	%	s. d.	s. d.
Cost of Chick	3:10	27.7	4: 9	3: 7
Food	7: 2	51.9	9: 3	5: 2
Equipment Depreciation	-: 2	1.2	-: 5	-: 3
Heating	-: 3	1.7	-: 4	-: 4
Cost excluding Labour & Overheads	11: 5	82.5	14: 9	9: 4
Labour	1: 8	12.1	2: 7	1: -
Overheads	-: 9	5.4	1: 1	-: 6
Less Credits	13:10 -: -	100.0	18: 5 -: 1	10:10 -: 1
COST TO POINT-OF-LAY	13:10		18: 4	10: 9
Food consumed - lbs.	23.37		28.76	17.06
Purchased Food as % of Ration	79.2		91.4	72.4
Average Cost of Purchased Food per cwt.	37s. 0d.		37s. 4d.	37s. 8d.
Average Cost of all Food per cwt.	34s. 3d.		35s. 9d.	33s. 10d.
Average Age at Point-of-Lay	20 wks. 5 days		21 wks.	20 wks.
Mortality %	5.2		3.8	3.9
Labour - Hours per bird	0.40		0.63	0.23
Average Number reared	490		472	1,030

Table C

Average Cost Per Bird Reared: Day-Old to Point-of-Lay
10 Batches for Hatchery Supply

Item	Average - 10 Batches		Average 8 Heavy Batches	Average 2 Light Batches
	s. d.	%	s. d.	s. d.
Cost of Chick	3: 3	21.8	3: 3	3: 6
Food	9: 8	64.8	10: 4	7: 3
Equipment Depreciation	-: 4	2.2	-: 5	-: 2
Heating	-: 2	1.1	-: 2	-: 2
Miscellaneous	-: 1	0.6	-: -	-: -
Cost excluding Labour & Overheads	13: 6	90.5	14: 2	11: 1
Labour	-: 11	6.1	-: 11	1: -
Overheads	-: 6	3.4	-: 6	-: 6
Less Credits	14: 11 -: 5	100.0	15: 7 -: 7	12: 7 -: 1
COST TO POINT-OF-LAY	14: 6		15: -	12: 6
Food consumed - Lbs.	32.58		34.90	22.50
Purchased Food: as % of Ration	74.2		72.9	87.4
Average Cost of Purchased Food per cwt.	37s. 9d.		37s. 11d.	37s. 4d.
Average Cost of Food per cwt.	33s. 7d.		33s. 1d.	35s. 7d.
Average Age at Point-of-Lay	22 wks. 5 days		23 weeks	21 wks. 3 days
Mortality-%	5.5		5.2	6.5
Labour - Hours per Bird	0.22		0.21	0.25
Average Number reared	1,243		1,346	825

Methods of Costing and Standards Used

Food - Purchased food was charged at purchase price, delivered on the farm, whilst home-grown food was entered at estimated market value. Where food was home-mixed, a charge for milling and mixing was added, relating to the degree of home-mixing practised on the farm for all stock.

Labour - Labour of the farmer was charged at 5s. 8d., with wife and family at corresponding rates per hour.

Overheads - These were calculated according to the method recommended by the Scottish Conference of Agricultural Economists, being 7s. 9d. per £1 of man labour employed on the rearing unit and 33s. per livestock unit. In the case of young birds costed in this Report, each bird constitutes 1/200 livestock unit.