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Business Records for Poultry Keepers

IT PAYS a poultry raiser to keep informed about the many details of his business. There are numerous opportunities to improve the efficiency of the poultry enterprise on farms, and carefully kept records provide information that is useful in planning for profitable poultry production.

The wide variation in results obtained on poultry farms indicates that better returns from poultry may be gained by a more thorough knowledge of the business and by using better business methods in the production and marketing of the products.

Application of better business methods to poultry production and marketing problems has enabled many poultrymen to obtain good returns from their flocks when other poultrymen were losing money.

This bulletin aims to assist poultry keepers in their efforts to apply business methods to their production and marketing problems. Several kinds of poultry records that are useful for farmers to keep are shown and discussed, and steps are suggested for analyzing the records to get the most out of them. Farmers with small, side-line flocks, as well as those with large flocks, should find suggestions here for improving the efficiency of their poultry business.

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BUSINESS RECORDS FOR POULTRY KEEPERS

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USEFULNESS OF POULTRY RECORDS

MOST POULTRY KEEPERS find that it pays to keep records of current operations to guide their efforts in profitable directions. Some of the reasons for keeping records are as follows: (1) They reduce the guesswork in poultry farming by helping the farmer to determine the actual reasons for poultry profits and losses, (2) they tend to show the relative efficiency of different methods of production and marketing, (3) they make it possible for a poultry keeper to compare his results with published information on many poultrymen's problems, (4) they show the financial progress a poultry keeper has made in his business, (5) they furnish information for credit statements when funds are borrowed, and (6) they help to prevent disputes by serving as a check on business dealings.

This bulletin brings together a variety of forms of records usefel to poultrymen. No poultryman has occasion to use all of them in full detail all the time; the interest in and need for detail should settle the matter with each poultryman. The bookkeeping needs of the farmer whose poultry is a side line are less exacting than are those of the poultryman who specializes in egg production or in other phases of poultry farming. The forms shown are likely to need some modification for any individual case; more columns or more lines may be supplied to preserve a record of the facts needed to answer questions not here anticipated.

WHAT RECORDS TO KEEP

The records needed to find the amount of return for the year are the cash accounts and the annual inventories. The inventories show the size and condition of the enterprise at stated times; an increase during a period may be considered as equivalent to a receipt of cash, and a decrease may be considered as an expense. Some kind of cash account of receipts and expenses is usually kept, providing a balance,

used as a measure of the return. Such a balance is an incomplete statement of returns without consideration of inventory changes and estimates of the value of home-grown feeds, especially on general farms. Egg-production records are almost universally kept. These three sets of records should be kept by every poultryman in detail sufficient for his needs. (See p. 3.) In addition, other special records are helpful under certain conditions, as is pointed out in connection with the following forms.

A list of the typical records discussed in this bulletin follows.

Records all poultry raisers should keep:
Inventory, Form 1.
Receipts and expenses, Forms 2, 3, 4.
Egg production, Form 5.

These records, plus the estimated value of home-produced feeds and the value of meat and eggs used by the household, give the financial results of the poultry business for the year. The distribution of the egg lay is also shown. These records are necessary for the proper interpretation of any other records that may be kept.

Additional records for those who wish detailed information on specific phases of the poultry enterprise:
Feed, Form 6.
Labor, laying flock, 8.
Labor, growing flocks, 9.
Egg sales, 10.
Fowl sales, 11.
Chicken sales, 12.
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Records kept on these forms are suitable for bringing out the details of practice; and with them as guides, poultry keepers can make indicated changes with confidence in the results to be expected.

The troublesome question of the form of the accounts, score cards, or records, is best settled by the individual, as his interest in particular lines of work develops. Any of the following may be kept to advantage without direct reference to the others, but the greatest benefit, with the least work, results from considering any part of the business in its relation to the whole. The receipts may be separated as (1) sales of eggs, (2) sales of poultry, and (3) all other receipts, the total being the cash received. If the receipts from poultry are to be divided, the sum of receipts from sales of chicks, pullets, broilers, and old hens, each kept separate in the record, is brought into final summary as one figure. The feed expenses, which must usually be roughly estimated (for layers, brooder stock, and range stock), can not amount to more than the total feed expense arrived at from the feed bills plus value of home-grown feed.

With the occasional counts every poultryman makes, and the quantity factors supplied by sales and purchase records, almost any of the performance records that are published from time to time can be directly compared with the poultryman's own results. These comparisons are distinct aids to improved management. When detailed accounts are kept every care should be exercised to maintain the classification; otherwise confusion follows, and most of the benefit is lost.

INVENTORY

The poultryman's inventory is an itemized list of property on a given date, with the values of each assigned. Form 1 is a condensed inventory sufficient for comparisons of annual growth over a period of years. The counts and descriptions are the important features of the inventory. Large differences in number, quality, or conditions need to be shown by listing the lots separately. For example, all the stock on the place on the inventory day should be counted and appraised; the three classes shown are usually enough. Birds ready to be sold, even if to be sold in the next week, may well be listed separately from those to be kept through the winter, to avoid confusion later. If more than one breed is kept the counts for each breed are worth separate listing, as are specially selected pens of breeding stock from which hatching eggs are expected.

FORM 1.—INVENTORY OF THE POULTRY ENTERPRISE [1]

Item	Beginning of year (October 1)		End of year (September 30)		Change in value	
	Number	Value	Number	Value	Increase	Decrease
		Dollars		*Dollars*	*Dollars*	*Dollars*
Total capital [2]		11,173		12,205	1,250	218
Real estate		6,600		6,475		125
Land, acres	20	4,000	20	4,000		
Laying house	2	2,500	2	2,375		125
Incubator house						
Feed building						
Other buildings						
Other improvements		100		100		
Stock	1,500	4,000	1,800	4,800	800	
Pullets	1,000	3,000	1,200	3,600	600	
Hens	500	1,000	600	1,200	200	
Males						
Feed on hand, pounds	2,000	60	1,000	30		30
Straw and litter, pounds	6,000	30	4,000	20		10
Equipment		355		771		34
Incubators			1	450	450	
Brooders	8	240	8	216		24
Watering equipment		20		20		
Cleaning equipment		40		40		
Egg cases and fillers		15		10		5
Shipping crops		15		15		
Miscellaneous		25		20		5
Eggs on hand, dozen	130	78	100	59		19
Miscellaneous supplies		50		50		

[1] The figures in this form as well as in the forms that follow, are merely for the purpose of illustrating how the items are put down in the record.

[2] Sum of items shown. The cash balance and the debts of the enterprise must also be considered as significant parts of the inventory, but for ordinary purposes especially on diversified farms, it is not customary to add them to enterprise statements.

Inventory counts and values are intimately connected with the cash account as will appear more clearly later, so that in general the classifications of inventory and cash account should be the same. The first inventory date is the date for beginning all the other records. Most poultrymen find that October 1 or November 1 is the best time to begin the year's accounts.

RECEIPTS AND EXPENSES

Returns from the enterprise can be figured closely only when the multitude of sales, purchases, and payments made during the year are put on paper and added.

Form 2 provides the minimum of information needed for any other purpose than accumulating the totals. Starting with the inventory date, receipts and expenses are set down as they occur. Dates are too important to neglect; they are highly useful in comparing prices and are often indispensable when questions of fact are raised by the other parties to transactions. Quantities are needed in accounting for production, in determining rates, and in planning ahead.

All items must be put into the record separately; otherwise the information for which the accounts are kept can not be obtained except by rough estimate. Lots of eggs sold at different prices may well be written down separately even though sold and paid for on the same day—if condition, size, or customer was a factor worth recalling in explanation of the price difference. Value, divided by quantity, shows the average price; that average price may be enough most of the time, but when grades are a factor each grade sold ought to be treated as a separate lot for record purposes with its quantity, price, and total value. The description of the items should be specific enough to enable one to make desired sortings of the items at a later time.

A page or more of a blank book may be devoted to each month's business. Another modification is to use the book spread open for each month, left page for receipts and right page for money paid out. This form is condensed and simple and is perhaps the easiest for most persons, as there are relatively few transactions to keep in good order.

FORM 2.—DAILY RECORD OF CASH RECEIPTS AND EXPENSES

Month and date	Item	Quantity	Price per unit [1]	Receipt [2]	Expense [3]
			Dollars	*Dollars*	*Dollars*
October 8	Eggs	240 dozen	0.53	[3] 116.10	
October 8	Wheat	1,000 pounds	50.00 T		25.00
October 8	Corn	2,000 pounds	40.00 T		40.00
October 10	Incubator	1	480.00		480.00
October 10	Lumber	500 feet	30.00 M		15.00
October 12	Brooder stove	1	10.00	10.00	
October 13	Eggs	180 dozen	120 @ 0.50; 60 @ 0.38.	[3] 75.05	
Total					

[1] Actual price quoted in the transaction.
[2] Net cash at the farm.
[3] Selling costs have been deducted from the face value of the shipment.

Form 3 shows the next logical step, a summary of cash receipts from the different lines for the year. Preferably it should be made up every month, but because all the facts for making it are already in Form 2 or its equivalent it can be made up at any convenient time. The advantage in working it out each month lies in the closer knowledge obtained of the trend of receipts and in the greater opportunity it offers to correct errors which are likely to creep in.

The figures for Form 3 may sometimes be accumulated more easily by taking out of Form 2 all the items that relate to the market

egg sales and keeping them together on a separate page, or all the columns may represent details on separate pages.

The expense items really ought to be kept in classes as shown in Form 4, which is a monthly summary of the expenses set down in Form 2 or some modification of it. Seasonal differences in the items appear promptly in this record, and the record also provides basic information for planning ahead, once a farmer has a record for a year or more, for comparison. One is likely to err on the side of too few subdivisions of expense in the current record. Every inclination to combine unlike items in the record should be stifled; small items not needed in later figuring of performance or efficiency may properly be grouped together.

FORM 3.—SUMMARY OF CASH RECEIPTS, BY MONTHS

Month	Eggs		Fowls		Chickens		Miscellaneous	Total
	Quantity	Value	Quantity	Value	Quantity	Value		
	Dozens	*Dollars*	*Number*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Dollars*
October	900	450.00	100	150.00	200	150.00		750.00
November								
December								
January								
February								
March								
April								
May								
June								
July								
August								
September								
Total	1,520	6,080.50	715	905.00	1,310	725.00	225.00	7,935.50

FORM 4.—SUMMARY OF CASH EXPENSES, BY MONTHS

Month	Feed		Labor		Poultry		Miscellaneous	Total
	Quantity	Value	Quantity	Value	Quantity	Value		
	Pounds	*Dollars*	*Days*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Dollars*
October		255.00	4	12.00			490.00	757.00
November								
December								
January								
February								
March								
April								
May								
June								
July								
August								
September								
Total		4,674.36		210.00		750.00	710.00	6,344.36

The difference between cash receipts and cash expenses is only one of a number of measures of returns, and is really satisfactory only when the enterprise is entirely independent of other farm or personal enterprises, when there are no material changes in the inventory, and it is without debts.

Debts and credit transactions that involve two bookkeeping years complicate the bookkeeping. These transactions are matters of

financing, necessity, or convenience of the operator as a person. In figuring the earnings from the poultry enterprise for a year, or any of the cost or return factors, precise figuring requires that "cash receipts" be adjusted in one way or another to the sum which would have been received if all sales had been settled within the bookkeeping year, and that "cash expenses" be adjusted to the sum which would have been paid out had all goods and services been paid for in cash on the spot. As money borrowed is not a receipt of the poultry enterprise, the repayment of that money is not an expense of the business. The safest way is to enter in the book all receipts and expenses as they occur; then mark the items that do not belong to the current year's business; and at the end of the year, for purpose of computation, add in the proper amounts for unsettled accounts. Though these adjustments for credit transactions may be about equal at both ends of the year, such separation often clears up questions that would otherwise be obscure. Even with debts and credit transactions allowed for, one or more of the following adjustments must be made, and as size of business is one basis of judging relative success, totals are used rather than balances in the illustrative sample.

The cashbook (Forms 2, 3, 4), shows, for example, a total of $7,935.50 received and $6,344.36 paid out, leaving a balance of $1,591.14. This is sometimes thought of as "the profit for year," but such a balance may be much more or much less than the earnings of the enterprise during the year.

On the income side of the statement the enterprise furnishes eggs and birds to the family which have value; and eggs or birds sold but not paid for, or ready for sale but not yet sold, are earnings of the period just as much as if they had been converted into cash and entered on the book. In case they are not yet sold, one has valuable property instead of money in hand. Increase in the value of the equipment is usually offset by money paid out, so such an increase is not an income item like increase in number of birds or like sales not settled for.

After separation of cash items and addition of noncash inventory and other estimated items the following type of statement results:

Receipts:		
A. Cashbook items (Form 2 or 3)[1]—		
a. Sales of eggs and poultry	$7,710.50	
b. Miscellaneous receipts (sales of equipment, feed sacks, feed, manure, and the like)	225.00	
		$7,935.50
B. Inventory increases (Form 1)—		
a. Stock (and supplies, if any)	800.00	
b. Equipment (and real estate, if any)	450.00	
		1,250.00
(These items are often offset by expense.)		
C. Value of eggs and poultry used by the family (Form 13)		87.00
Total (gross receipts)[1]		9,272.50

Similar inspection of the expense situation promptly suggests that the cash expense total tells only part of the story. First there are the ordinary expenses for feed, hired labor, supplies, and services. Then there are the items paid for but not used up during the year, like the incubator in Form 2, which is offset by the inventory increase

[1] First adjusted to a basis of cash transactions for the bookkeeping year.

in Form 1. Then there may be home-grown feed, which sometimes is a large item of real expense in producing eggs and poultry in a farm flock. Then there may be inventory decreases which should be counted as expense before figuring profit. Sometimes an inventory decrease represents just as real an expense as any for which cash was paid out during the year, and sometimes it represents merely a conversion of property (stock or old equipment), into cash, but in either case receipts must be reduced by the amount before "profit" is figured.

Expenses:		
A. Cashbook items (Form 2 or 4)[2]—		
a. Feed, hired labor, supplies, services, for current use	$5,014.36	
b. Stock, equipment, and improvements to real estate (usually appear in inventory increases unless offset by wear and tear on other items)	1,330.00	
		$6,344.36
B. Inventory decreases (Form 1)—		
a. Stock, feed, straw and eggs	59.00	
b. Equipment and buildings (estimated depreciation)	159.00	
		218.00
C. Home-grown feed, estimated value (Form 6)		525.50
Total (gross expenses)[2]		7,087.86

A review of the year's business, including the inventory changes indicated, the value of home-consumed products, and cash transactions, (cash-for-the-period-basis), shows a difference of $2,184.64 between gross receipts and gross expenses. This sum represents, as nearly as is practicable to determine it, "the return to unpaid labor and to capital," sometimes called operator's "profit." It is $593.50 larger than the balance of the cash items, and though this additional sum was not available for spending in the year of account it was in a form which would yield cash the next year perhaps by sale of birds, perhaps through increased earnings, or perhaps through reduced expenses. The earnings of a business for a specified period may be quite different from the cash sum which the operator of the business may reasonably spend for personal purposes during the year.

The sum "return to unpaid labor and to capital" can be split up as the bookkeeper wishes. In this case, assuming no labor unpaid except the operator's and assuming no debts, the $2,184.64 would pay the operator $100 per month for work done and a little more than 8 per cent interest on the capital value of his property at the beginning of the year. If he figured that he ought to get for his work 50 cents an hour for three hundred and sixty-five 10-hour days ($1,825), the interest on his own capital is reduced to $360 or about 3 per cent. If, moreover, he wants to show a return to management, or true profit, he must decide on a satisfactory rate of interest and an agreeable value for his own services as a physical worker, both of which are to be deducted from the $2,184.64.

Such unlimited choice in the statement of results makes comparisons difficult, but it emphasizes the importance of knowledge of the whole situation for one's own business.

[2] See footnote 1.

EGG-PRODUCTION RECORD

The daily egg record means much to the observant poultryman as it helps him to see and to measure the changes in production that can be accounted for by changes in feeding practices, weather conditions, or other factors.

Form 5 shows a wall or desk sheet of the daily production of eggs and a summary for the month. The bird count is needed to get the average production for the month, a common measure of performance. An extension of this record is a similar record for pullets separate from the older laying stock, or for special pens, all of which together with the main record make the total egg production for the day. All usable eggs should be counted whether salable or not, in order that eggs per hen, eggs per 100 pounds of feed, or other rates may be figured as closely as possible.

FORM 5.—EGG-PRODUCTION RECORD

Day of month	192-			192-								
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	600											
2	625											
3	618											
4	622											
5	630											
6	650											
7	695											
8	686											
9	650											
10	700											
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Total	18,439											
Number of hens [1]	1,487											
Eggs per bird	12.4											
Per cent production	40											

[1] The exact figure is obtained by using the hen-day basis, in which the number of hens is multiplied by the actual number of days in which they are in the pen and this total is divided by the number of days in the month. A shorter method, and one that is often satisfactory, is to add the number on hand at the beginning of the month and the number at the beginning of the following month, and divide by two. A figure sometimes used, but not recommended, is the number on hand at the beginning of the month.

FEED

Figuring of feed consumption rates and costs, in comparison with egg production and egg prices, is abundantly worth while, as feed is the biggest single item of current cost of egg production and constitutes the larger part of the cost of raising pullets.

Accurate feed records are often difficult to obtain, especially on farms on which the feed used by poultry is not kept separate from the feeds for other farm livestock or on which both home-grown and purchased feeds are used in the ration. One way of bringing feed consumption and costs together on such farms is illustrated in Form 6. In the first column of the form should be listed all of the kinds of feed used by the poultry during the month for which the information is wanted. The home-grown and the purchased feeds should be listed separately. In the second column should be entered the usual quantity fed per day in the ration. The third column is for entering the number of days that the particular feed was used during the month. Current prices for the various feeds are entered in the fifth column. If it is desired to observe the feed cost of egg production for different pens, or for hens and pullets separately, or to observe the feed cost of raising pullets, separate ration reports should be made out for each class of poultry. Care should be taken to see that all the estimates added together approximate the total fed to poultry.

FORM 6. POULTRY RATION REPORT FOR ESTIMATING FEED CONSUMPTION AND COST FOR MONTH OF OCTOBER[1]

Kind and source	Quantity fed per day	Days fed during month	Total quantity	Price per 100 pounds	Total value	
					Home-grown feeds	Purchased feeds
Grain:	*Pounds*	*Number*	*Pounds*	*Dollars*	*Dollars*	*Dollars*
Wheat (purchased)	82.5	31	2,557.5	2.75		70.33
Corn (purchased)	20.0	31	620.0	2.55		15.81
Corn (home grown)	62.5	31	1,937.5	2.40	46.50	
Total	165.0		5,115.0		46.50	86.14
Mash:						
Corn meal (purchased)	52.5	21	1,102.5	2.55		28.11
Bran (purchased)	52.5	21	1,102.5	2.15		23.70
Beef scrap (purchased)	52.5	21	1,102.5	3.90		43.00
Middlings (purchased)	52.5	21	1,102.5	2.15		23.70
Commercial mash	210.0	10	2,100.0	2.40		50.40
Total	420.0		6,510.0			168.91
Other feeds:						
Milk (home grown)	30.0	31	930.0	4.00	37.20	
Cabbage (home grown)	50.0	31	1,550.0	1.00	15.50	
Shells, grit, etc.						5.00
Total	80.0		2,480.0		52.70	5.00
Total value all feeds					99.20	260.05

[1] Similar forms can be used to figure the feed consumption and costs for growing pullets or for individual pens.

The specialized poultryman who buys all his feed can often ascertain his feed consumption and costs with comparatively litttle trouble. He has only to count the sacks regularly and multiply by billed prices. Everything is weighed for him and priced for him so that he needs only to be sure that he does not run the feed for baby chicks, pullets, or cockerels into the feed report for the layers—not if he wants to figure cost of eggs or test out a ration.

The value to be used in figuring cost of home-grown feeds is a matter of indifference so long as it is about that current in the locality. Too high a value reduces the profit shown by poultry, whereas too low a

value unduly favors the poultry. Neither has any effect on the profit of the whole business. Jockeying values to make impressions is not only poor business but defeats the purpose for which business records are kept.

Form 7 is a summary of monthly feed quantities and values.

FORM 7.—SUMMARY OF ALL FEED USED BY MONTHS [1]

Month	Grain		Mash		Other Feeds	
	Pounds	*Dollars*	*Pounds*	*Dollars*	*Pounds*	*Dollars*
October	5,115	132.54	6,510	168.91		57.70
November						
December						
January						
February						
March						
April						
May						
June						
July						
August						
September						
Total						

[1] If the laying and rearing flocks are to be studied separately, two feed forms should be used.

LABOR RECORD

Labor is the second largest item of expense of poultry keepers. As such, its importance suggests close study from time to time to find out how effectively the work is done and if something can be done to improve it. Some farmers care for twice as many birds as others with the same amount of labor. Halving the labor cost or doubling the output of the available labor sets up an attractive margin for the operator to work toward.

The labor record may emphasize either of two closely related lines: A time study, which has for its chief object the determination of the best use of the labor available; or a cost study, which is more important in the case of enterprises that use hired labor than in the case of flocks in which all the work is done by unpaid family labor, or in the case of a farmer who wonders whether the poultry enterprise pays as well for the time spent on it as do the cows, hogs, or crops.

For the purposes of the annual summary (Form 3), the labor bill may be estimated at the end of the year. The value of family labor has to be estimated rather arbitrarily at a figure comparable with the wages and work accomplished by hired labor; or else the total return left for family labor may be figured as the sum left over after all other charges are deducted, from which the wage rate earned by unpaid labor is computed by dividing the sum so reached by the time worked by the owner and his family.

A summary labor record for the laying flock is given in Form 8. One day a month the time spent on regular daily work (chores) is observed closely. This includes all items—feeding, watering, cleaning pens, opening and closing pens, gathering eggs, and the like. The daily time, multiplied by the number of days, gives the time spent during the month. Time spent in marketing and preparing eggs for market may be similarly estimated. "Other" work includes the

occasional jobs like repairing fences, unloading a truck of feed, or culling the flock. This occasional work may be estimated as a total for the month unless some kind of work of that description is done nearly every day. The form provides for the separation of the work done by hired labor. If from the totals for the year the time worked by hired labor is subtracted, the result gives the time worked by the owner and his family, which time may be valued at the same rate per day or at any other rate that may seem best.

Similar records may be made for any other subdivision of the flock for which a time record is wanted. (Form 9.) In this connection as before, the estimates for any part of the flock should be compared with the total labor on the whole flock so that the estimates may be kept within the bounds of reasonable fact. When the number of birds in a lot changes materially the numbers cared for in each period should be noted, so that labor per 100 birds (or other unit) may be figured. The ideal of a uniform figure per bird each month, in spite of changes in number, can seldom be reached, but failure of the figures to approach a uniform figure indicates time available for other more profitable effort.

FORM 8.—LABOR REPORT—LAYING FLOCK

Month	Kind of work	All labor			Hired labor				
		Hours per day	No. of days	Total hours	Hours per day	No. of days	Total hours	Rate per hour	Total value
October	Daily chores	8½	31	248	9	2	18	40¢	$7.20
	Mktg. & prep. for mkt[1]	1½	31	46½					
	Other	½	31	15½					
November	Daily chores	7	30	210					
	Mktg. & prep. for mkt	2	30	60					
	Other	1	30	30					
December	Daily chores	7½	31	232½					
	Mktg. & prep. for mkt	1½	31	46½					
	Other	1	31	31					
January	Daily chores								
	Mktg. & prep. for mkt								
	Other								
February	Daily chores								
	Mktg. & prep. for mkt								
	Other								
March	Daily chores								
	Mktg. & prep. for mkt								
	Other								
April	Daily chores								
	Mktg. & prep. for mkt								
	Other								
May	Daily chores								
	Mktg. & prep. for mkt								
	Other								
June	Daily chores								
	Mktg. & prep. for mkt								
	Other								
July	Daily chores								
	Mktg. & prep. for mkt								
	Other								
August	Daily chores								
	Mktg. & prep. for mkt								
	Other								
September	Daily chores								
	Mktg. & prep. for mkt								
	Other								
Total	Daily chores								
	Mktg. & prep. for mkt								
	Other								

[1] Marketing and preparation for market.

FORM 9.—LABOR REPORT—GROWING FLOCK

Month	All labor			Hired labor				
	Hours per day	Number of days	Total hours	Hours per day	Number of days	Total hours	Rate per hour	Total value
							Cents	*Dollars*
March	6	31	186	2	31	62	40	24.80
April	5	30	150	1	30	30	40	12.00
May	4	31	124					
June								
July								
August								
September								
Total								

SALES RECORDS

Sales records are records in which the receipts are kept in greater detail than is usually considered necessary for preserving in the record of receipts. (Form 2 or 3.) When sales are numerous, because different outlets may pay different prices or may offer different terms, a thorough analysis of all egg sales should be helpful in deciding the best markets for the eggs. When a decision is reached, the detail may perhaps then be dropped. In practice, if duplicate sales slips are made out or received in settlements, these slips constitute the sales record. They may be sorted in order to put together all that are alike, and then all the different piles are summarized for the permanent record before the slips are destroyed. Several sortings may be made—by grade, by price, by method of sale, by firms to which sales are made, by customer, or by market. Forms 9, 10, and 11 show basic information about sales for eggs, for fowls, and for chickens. Other information that can be obtained by modification of the form or by supplementary computations will occur to the poultryman who begins to use the form.

Among the readily available summaries from the egg-sales record are quantities sold weekly or monthly (sometimes called seasonal distribution of production); average prices, and seasonal movement of prices; total received for eggs; check-up on payment for eggs shipped; difference in price of the grades (if eggs are graded at the farm); and cost of marketing, if the transportation and selling charges are noted in addition to the net price and net value. A column might be added to show the quoted price in one or two markets to which the eggs might have been sent, for comparison with the price actually returned by the firm to which the eggs were sent. Comparison of the total eggs sold with the total produced (daily egg record added, Form 5), may occasionally be made to advantage as a check on home use and breakage. The poultryman is accustomed to turning over in his mind all of these points of management. The record assures definiteness of the ideas, whereas memory may not reliably provide the information, especially for comparisons with past seasons.

Sales of fowls should be kept separately from sales of chickens or broilers. Market seasons are distinct, conditions different. Running the receipts from these two classes of stock together, or bunching receipts from poultry and eggs together, means sacrificing much of the benefit that might be gained from keeping the record.

FORM 10.—RECORD OF EGGS SOLD[1]

Shipment				Settlement					
Date	Destination	Dozen	Grade or description	Date	Dozen	Grade or description	Price per dozen	Express, commission, etc.	Net cash
							Cents	*Dollars*	*Dollars*
Oct. 8	M & Co. N. Y. City.	240	Extras	Oct. 15	240	Extras	53	11.10	116.10
Oct. 13	J & Co. Phil.	180	Ungraded	Oct. 16	120	Extras	50	5.40	54.60
				Oct. 16	60	Small	38	2.35	20.45

[1] Use one line for each sale.

FORM 11.—RECORD OF FOWLS SOLD[1]

Shipment				Settlement				
Date	Destination	Number	Total weight	Date	Total weight paid for	Price per pound	Express, commission, etc.	Net cash
			Pounds			*Cents*	*Dollars*	*Dollars*
Jan. 10	C & Co. N. Y. City	100	424	Jan. 17	410	24	14.50	83.90
Jan. 25	" " "	54	220	Feb. 2	218	25	8.15	46.35

[1] Use one line for each sale.

FORM 12.—RECORD OF CHICKENS SOLD[1]

Shipment				Settlement				
Date	Destination	Number	Total weight	Date	Total weight paid for	Price per pound	Express, commission, etc.	Net cash
			Pounds			*Cents*	*Dollars*	*Dollars*
July 1	K & Co. N. Y. City	300	450	July 8	448	30	18.10	116.30
July 12	K & Co. N. Y. City	275	420	July 15	402	28	16.50	96.06
July 20	K & Co. N. Y. City	200	390	July 28	390	26	15.10	86.30

[1] Use one line for each sale.

RECORDS OF EGGS AND POULTRY FOR HOUSEHOLD USE

The value of eggs and poultry furnished to the farm family by the poultry enterprise is often an important factor in poultry returns, especially on farms where the flocks are small. One way of keeping a record of this information is shown in Form 13. In some cases the poultry products used can be estimated closely enough and entered in the form at the end of each month.

FORM 13.—RECORD OF EGGS AND POULTRY FOR HOUSEHOLD USE

Month	Eggs			Fowls			Chickens		
	Quantity	Price per dozen	Value	Quantity	Price per head	Value	Quantity	Price per head	Value
	Dozen	*Cents*	*Dollars*	*Number*	*Cents*	*Dollars*	*Number*	*Cents*	*Dollars*
October	15	30	4.50	4	75	3.00			
November									
December									
January									
February									
March									
April									
May									
June									
July									
August									
September									
Total	200		43.00	40		32.00	30		12.00

PEN RECORDS

Whenever the flock is sorted into pens by age, breed, condition, or heredity, a pen record is a distinct help in judging the performance of the pen with respect to eggs produced, weight gained, or feed consumed. If the main object is merely mechanical separation to prevent crowding the pen record is a help in checking numbers. Actual counts then need to be made only for checking purposes at convenient times.

Starting with the number in the pen at inventory time (or when the pen is made up), the numbers added are set down in one set of columns, and the numbers transferred, sold, used at home, or lost by death are set down in another set of columns. (Forms 12, 14, 15.) Thus at any time the exact number of birds in the pen may be figured, and this number should check with the count of birds actually in the pen at that time. Of course, if fences are not tight or if chickens escape into adjoining pens, the pen record will not check with the count, but the addition of all the pen records will still yield useful information about the numbers of birds in the flock and what disposition was made of them.

The pen records, separately and added together, provide the information to be used in connection with Form 5 to get the percentage production; with Form 6 for figuring the feed consumed per bird or per dozen eggs; with Form 8 for figuring the labor used; with Forms 10, 11, 12 for checking the relative values of eggs, fowls, and chickens. Poultrymen who have kept flock records of this kind find that a card tacked in the pen is convenient. They also emphasize the value of setting down the mortality and the reasons for the deaths. The other disposal items can be obtained from other records for the flock as a whole, though it is often convenient to specify disposition on the pen record and it is always necessary when performance by the pen is to be figured out.

At the end of each month it may often be desirable to summarize the pen information for the purpose of observing monthly or seasonal changes in numbers of layers, chicks, or pullets on hand. Such a summary is shown for the laying flock in Form 17. Summaries for the brooding and rearing flocks can be made in the same way.

FORM 14.—PEN RECORD, LAYING FLOCK

PEN NO. 4:[1] BREED, WHITE LEGHORNS, PERIOD, OCTOBER, 1928-MARCH, 1929

Item	Oct.	Nov.	Dec.	Jan.	Feb.	March
Number on hand first of month	500	488				
Number died, missing, or stolen during month	(12)	(4)				
Principal causes of losses	Roup	Unknown				

DISPOSALS, ADDITIONS, AND COUNTS

Date	Sales, transfers, and used in home		Date	Additions and purchases		Counts, and dates for same [2]
	Number	Disposition		Number	Source	
Jan. 10	20	Hens sold	Nov. 22	30	From Pen 4	Date *Dec. 1*
Jan. 20	2	Home use				*Number 512*

[1] All the pen records added together give the flock record.
[2] The counts are made for checking purposes at convenient times.

FORM 15.—PEN RECORD, BROODER CHICKS

PEN NO. 1: DATE STARTED, *MAR. 29*, NUMBER STARTED *1400*, BREED, *W. LEGHORNS*

MORTALITY AT VARIOUS AGES—AGE IN WEEKS

	1	2	3	4	5	6	7	8	9	10	Total
Number died during week	28	26	15								
Principal causes	Weak Chicks	Weak Chicks	Cold weather								

DISPOSALS, ADDITIONS, AND COUNTS

Date	Sales, transfers, and used in in home			Date	Additions and purchases			Counts, and dates for same
	Number	Pullet or cockerel	Disposition		Number	Pullet or cockerel	Source	
May 30	300	Cockerels	Market	May 15	20	Cockerels	J. Brown	Date *June 1* Number *1051*
June 5	600	Pullets	Range					Date *July 1* Number *550*

FORM 16.—PEN RECORD, PULLETS ON RANGE

RANGE NO. 1: DATE JUNE 5, NUMBER STARTED 600, BREED, *W. LEGHORNS*

Mortality at various ages—Age in months

	3	4	5	6	Total
Number died, missing, or stolen during month	11	1			
Principal causes	Hawks.	Skunks.			

DISPOSALS, ADDITIONS, AND COUNTS

Date	Sales, transfers and used in the home		Date	Additions and purchases		Counts and dates for same
	Number	Disposition		Number	Source	
July 1	25	Sold as culls	June 15	20	J. Brown	Date July 5 Number 865
Aug. 24	100	Sold for layers	July 1	300	Brooder No. 3	Date —— Number ——

FORM 17.—SIZE OF LAYING FLOCK FIRST OF MONTH AND CHANGES IN SIZE DURING MONTH [1]

Month	On hand beginning of month	Purchases and additions	Sold		Home use	Died
			Market	Breeders		
	Number	*Number*	*Number*	*Number*	*Number*	*Number*
October	1,500		50		5	20
November	1,425					
December						
January						
February						
March						
April						
May						
June						
July						
August						
September						
October [2]	600					
Total	[3] 16,250		705	10	40	145

[1] This record should not include pullets added to the flock at the end of the year.
[2] This second October 1 inventory is needed for the purpose of taking care of the flock changes in September, in order to complete a years record.
[3] Dividing this total by 13 gives an approximate figure for the average size of the flock for the year.

INCUBATION AND HATCHING RECORDS

The principal items to be included in a properly kept record of incubation are given in Form 18. If the operator makes a business of selling day-old chicks it would be well to add another column to show the disposition of the chicks hatched—whether they were sold or kept on the farm.

FORM 18.—INCUBATION RECORD

Date set	Eggs set	Breed	Source or class of eggs	First test		Second test	Chicks hatched	Percentage hatched of all eggs set
				Infertile	Dead germs	Dead germs		
	Number			*Number*	*Number*	*Number*	*Number*	*Per cent*
Mar. 7	2,000	W. Leg	Own flock	200	100	40	1,400	70
Mar. 14	2,500	W. Leg	J. Jones	200	100	50	1,775	71
Mar. 21	2,000	R. I. Red	H. Brown	240	120	60	1,300	65
Total								

DIARY OR NOTES ON MANAGEMENT

Many experienced poultrymen make a practice of setting down on paper significant notes on important events—weather, changes in practices, and the like—which are related to their management of the flock. Such a record may be in the form of a printed diary which can be purchased, but a blank book serves every need and is more flexible in space utilization. (Form 19.) The date of the observation is important. The nature of the items to record is a matter of possible later interest. Days may pass without occasion for writing in the diary; then many things of permanent interest may happen. Some men use the diary for describing the terms and condition of sale, forecasts of returns, comment on markets, and other phases of management previously suggested in connection with the several forms. Convenience of the poultryman controls, but general usefulness suggests, the record of all comment with the form to which it applies. The principle is that the records kept should together provide the poultryman with the facts he needs in figuring results of past efforts and in planning for the future.

FORM 19.—NOTES ON MANAGEMENT

Date	Remarks
October 15	Started lights on pullets, mornings and nights, 13-hour day.
October 15	Started to feed cod-liver oil to layers, 1 quart per 100 pounds of mash.
October 16	Cold, rainy weather.
October 17	Pullets confined for winter.
October 19	Closed all rear openings in houses.
October 21	End of cold, rainy weather; birds came through in good shape, no colds.

MAKING USE OF THE RECORDS

Although the mere keeping of records, a few or many at a time, is of some small benefit, the full fruits of the work done are not to be gathered until the records are used to answer questions of policy and practice.

Poultry keepers who have difficulty in analyzing and making use of their records may be helped by considering the following method of procedure.

1. **Summarize the important factors of price and production.**—A partial set of the factors of price and production is offered for example in Form 20. All of these may be figured from the forms suggested. The form provides a permanent record of the accomplishments in each of three years. Other factors of special interest can be added at will. All need not be used. A summary table of this kind provides a good basis for beginning an analysis of price, production, and other factors which may have affected poultry earnings during a given period.

FORM 20.—SUMMARY TABLE OF IMPORTANT FACTORS IN POULTRY-FARM MANAGEMENT

Item	Information brought forward from form numbers	1928–29	1929–30	1930–31
Egg production per hen and marketing practices:				
Eggs laid—				
Oct.-Dec.....Number	5, 14, 17			
Jan.-Mar.....do				
Apr.-June.....do				
July-Sept.....do				
Total for year.....do				
Per cent of eggs graded as "Extras"..Per cent	10			
Feed per bird:				
Grain, laying flock.....Pounds	6, 7, 14, 17			
Mash.....do	do			
Grain, rearing.....do	6, 7, 15, 16			
Mash, rearing.....do	do			
Labor:				
Labor per 100 fowls—				
In laying flock.....Hours	8 & 17			
Pullets raised.....do	9 & 16			
Costs:[1]				
Cost of grain per 100 pounds—				
Laying flock.....Dollars	6 & 7			
Mash.....do	do			
Grain, rearing.....do	do			
Mash, rearing.....do	do			
Feed cost per dozen eggs produced.....Cents	5, 6, 7			
Returns:				
Price received for —				
Eggs, per dozen.....do	10			
For fowls per pound.....do	11			
Broilers per pound.....do	12			
Mortality:				
Laying flock.....Per cent	14, 17			
Brooder flock.....do	15			
Pullets on range.....do	16			
Chicks hatched in per cent of all eggs set.....do	18			
Pullets raised per 100 chicks started.....Number	15, 16			

[1] See notes at bottom of Forms 5 and 6.

2. **Study the price factors.**—Prices received for eggs, fowls, and broilers, and prices paid for feed and other important poultry items have an important effect on poultry earnings. These prices have varied considerably during past years, often causing wide fluctuations in net returns from poultry farming. For a given period feed prices may be high or low in relation to egg prices, or prices of poultry meats may be high or low in relation to egg prices, or the spring and summer, (storage season), price of eggs may be high or low in relation to the fall and winter price, and so on.

It is important to study the records and other sources of information to find out what the price relationships were for the period covered by the records. These relationships should then be compared with similar data for other years. Price information for these comparisons can be obtained from the records of previous years for the same farm and from price quotations published in trade papers, in the Yearbook of the United States Department of Agriculture, and in other reliable publications.

The county agent, the State college of agriculture, or the United States Department of Agriculture will furnish poultrymen with price data that will enable them to know price trends for poultry and other farm products. Information of this kind is used by successful farmers in planning increases or decreases in the different lines of production and in planning feeding and other practices that are likely

to be most profitable under the conditions that are expected to prevail. Farmers should compare their own prices and price trends with those for their locality or for the leading markets. This will enable them to know whether the prices they received were higher or lower than the market level, and may possibly suggest means for improving the price relationships for their farm production the following year. Perhaps it will be found that prices received for poultry products can be improved by a close study of marketing requirements or by having more eggs to sell during the fall months.

3. **Study the production factors.**—Among individual farmers there often is wide variation in the seasonal and annual production of chickens on farms, in the amount of labor used in poultry farming, and in the mortality of chicken flocks. Although extreme changes in weather conditions affect the average egg production, health, or mortality of most flocks in a section, it has been demonstrated that some poultrymen are able to obtain good production results from their flocks in spite of adverse conditions. This is an important factor in the success of many poultry keepers.

The production factors in the summary table should be studied to determine where opportunities exist for improving or raising the production standards. Perhaps it will be found that the egg production for the year was low or that not enough eggs were produced during the winter months. Perhaps culling was neglected, and too many poor layers were kept on high-priced feeds, or perhaps too few pullets were saved per 100 chicks started.

4. **Select factors that offer best opportunities for improvement and plan to carry them out.**—Careful study of the records will probably reveal some things that offer better opportunities for improvement than others. These exceptional opportunities should be given further study and thought, for the purpose of making plans to put them into practice. The value of records will depend largely on the improvements made in the weaknesses that are revealed by the records.

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December 5, 1929

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