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Farm Business Analysis Summary
A Guide to Interpretation of the Computer Printout

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FARM BUSINESS ANALYSIS SUMMARY

A GUIDE TO INTERPRETATION OF THE COMPUTER PRINTOUT

Introduction

This manual is to be used by those persons wanting to develop a better understanding of the computer print-out for the Ohio State University Farm Business Analysis program. The method of calculating each figure is presented as well as a short explanation of what it means. Standards are presented where they are available to help indicate whether the value calculated is good, poor, or about average for a particular farm.

Very few farmers will find it necessary or want to read this manual in its entirety. Calculations for the total Farm Analysis are presented on the first pages of the computer print-out. These explanations which are found in the first half of the manual apply to all farms. The remainder of the manual is devoted to explaining calculations in the various crop and livestock enterprise sections. An individual will find it necessary to read only the explanation for those calculations which are not clear in either the total farm analysis or his particular enterprise section.

Calculations are explained for each item of information. For example, the method of calculating Gross Income per \$1,000 invested is discussed as well as desirable standards (i.e., figures which indicate what other farmers are doing) for different type farms. All other calculations are similarly explained and desirable standards are provided when they are available.

The first pages of the computer print-out provide an analysis of the TOTAL farm business. In addition, if sufficient information has been provided, one or more enterprise analyses is presented.

When looking at the analysis, the individual farmer, farm manager, lender, etc. can determine the profitability of the business, how efficiently resources were used, strong and weak points in the operation, and growth or progress of the business over time.

FINANCIAL HIGHLIGHTS

Page one and two (the business highlights) presents a summary of the entire business. All calculations appearing on this page are repeated on various pages of the report but are pulled together here in order to allow the farmer or someone working with the farmer to analyze the business quickly.

Prepared by John Bastian, Reed D. Taylor, John E. Moore, and Richard Duvick
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2. Two Options Are Available to you with the year-end analysis. A TOTAL farm analysis will be made for all farms but where sufficient information is provided, livestock or crop enterprise analysis will also be calculated. Columns 11-16 on page 2 and all of pages 3 and 4 should be completed if enterprise analysis is requested. If enterprise analysis is not requested, detach pages 3 and 4 and do not return with pages 1 and 2.
3. Do Not Use DARK Shaded Areas!
4. Nearest Whole Number--Round all figures to the nearest dollar, acre, bushel, ton, month, etc.
5. Do Not Cross Out A Line Or Write In Items--Each line as printed must remain. If you scratch out a line and write in some other identification, the figures you enter will be treated as though they were for the wording as printed.
6. Business To Be Included--The analysis is for the operator's business and includes receipts, expenses, and inventories as incurred by the operator. Tenants should not include receipts, expenses, and inventories for landlords and vice versa. Caution should be taken not to double count or leave out items that are in inventory. For example, livestock sold in the current period with payment received in the next period should be entered either as ending inventory or as cash receipts but not both.

IDENTIFICATION INFORMATION

1. Name--The operator's name and/or the farm number should be entered here. Complete operator's address, county, and year which the information represents.
2. Ownership Classification--The following general guidelines are suggested for determining the appropriate classification:
 - a. Full Owner--In addition to the full owner who is in the crop or livestock business, this group should include the crop farmer who cash rents all of his unowned land. Also, farms with less than 15 percent of the acreage share rented would be classified as Full Owners.
 - b. Part Owner - Part Tenant--The farmer who owns a farm and rents other acreages on a percentage share basis. Farmers who own more than 15 percent and share rent more than 15 percent of the acreage which they farm would be classified as Part Owner - Part Tenant.
 - c. Tenant Only--The tenant shares in all returns from crop and livestock. Also included would be farmers owning livestock or some of the acreage which they farm, but the amount of acreage owned is less than 15 percent of the total acreage farmed.
 - d. Tenant and Landlord--The total farm receipts and expenses are reported as one operation. This would include father-son partnerships.

an overall analysis of investment for each enterprise is conducted in the summary. The turnover ratio for each enterprise can be a good indicator when compared to previous years or to state averages.

The overall farm summary gives a combined analysis of your farm operation. This may tell you that things are going right or wrong, but it will not tell you where things are right or wrong. In order to find where the strong points and the weak points of your business are, you must request a detailed analysis of each of your enterprises. The information you receive through the farm records analysis can only be as accurate as the information you put in. It is therefore very important to keep accurate records of your farm operation.

Print-Out Values and Method of Calculation

TOTAL FARM SUMMARY

INCOME

CASH RECEIPTS: Individual receipt account totals are reprinted from the 7363 and totaled.

CAPITAL GAINS AND/OR LOSSES: The net sales value of Raised Breeding Animals plus the gain on the sale of Purchased Breeding Animals plus the gain on the sale of Machinery and Equipment less the loss on the sale of Purchased Breeding Animals, less the loss on the sale of Machinery and Equipment provide this value. These amounts are taken directly from the 7363.

INVENTORY CHANGES: Subtract beginning from closing inventory to obtain net gain or loss for each item. Items to be included are Raised Breeding Livestock, Market Livestock, Grain, Hay, Supplement, Supplies, and Fertilizer. These amounts are taken directly from the 7363. This value indicates the total net increase or decrease in value of inventory items.

FEEDER LIVESTOCK: Feeder livestock purchases are subtracted from gross income to reflect actual farm production.

GROSS FARM INCOME: Cash Receipts are adjusted for inventory changes and capital gains or losses. Cash Receipts plus changes in (Raised Breeding Livestock, Market Livestock, Grain, Hay, Supplement, Supplies, and Fertilizer Inventories) + capital gains or losses for Breeding Livestock, Purchased Breeding Livestock, Machinery and Equipment - Feeder Livestock purchases gives this figure. The necessary preliminary calculations have been performed in the above preceding steps.

EXPENSES

CASH EXPENSES: Individual expense account totals are reprinted from the 7363 and totaled.

DEPRECIATION: Depreciation amounts listed on the 7363 are totaled. Items to be included are buildings, fence and tile, machinery and equipment, and Purchased Breeding Livestock.

INTEREST NOT CHARGED: Interest not yet charged is charged here at 6 percent. The only interest recorded prior to this was interest paid. This interest value represents the money which could be earned on equity capital if invested elsewhere. Total Capital Investment x 6 percent minus paid interest (from page 1 column 2 of form 7363) indicates the interest on owned capital.

FEEDER LIVESTOCK: Feeder livestock purchases are subtracted here to compensate for the subtraction of feeder livestock from GROSS FARM INCOME.

TOTAL FARM EXPENSE: CASH EXPENSES + DEPRECIATION + INTEREST NOT CHARGED + UNPAID OPERATOR AND FAMILY LABOR - FEEDER LIVESTOCK PURCHASES provide this value.

MANAGEMENT INCOME AND PROFIT: TOTAL FARM EXPENSE is subtracted from GROSS FARM INCOME to obtain this value.

MANAGEMENT INCOME AND PROFIT AS A PERCENT OF GROSS FARM INCOME: MANAGEMENT INCOME AND PROFIT divided by GROSS FARM INCOME provides this value.

UNPAID OPERATOR AND FAMILY LABOR: This is calculated by adding the wages earned by the unpaid operator, wife, and family (wages earned by each equals hours worked by each x the value per hour for each entered on 7363.)

UNPAID OPERATOR AND FAMILY LABOR AS A PERCENT OF GROSS INCOME: UNPAID OPERATOR AND FAMILY LABOR divided by GROSS FARM INCOME provides this value.

OVERHEAD COSTS: This is the sum of all depreciation items plus Building Repairs, Interest, Taxes, Cash Rent, Insurance, and Interest Not Charged. Note that this figure includes a charge for interest on owned capital. These costs are essentially fixed and must be paid whether much or little is produced.

OVERHEAD COSTS AS A PERCENT OF GROSS INCOME: OVERHEAD COSTS are divided by GROSS FARM INCOME. This value indicates how much of your receipts are used to pay Overhead Expenses. If these expenditures for taxes, depreciation, insurance and interest are too large or too great per unit produced, it is difficult to have a profitable farming operation.

Burden of Overhead Differs With Types of Farms

The following values are for owner operator units

	<u>Poor</u>	<u>Better</u>	<u>Good</u>
Dairy, Dairy-Cash Crop, Corn-Hog + Cash Crop	45%	33%	28%
Dairy-Hog General	35	30	26
Livestock	30	27	24
Dairy-Poultry Poultry	25	15	11

These standards will vary by ownership classification also. For example, the previous values are for an owner-operator. Corresponding values for a tenant operation would be substantially less for all farm types. Values for a part-owner, part-tenant would fall between these two.

VARIABLE COST: This is the sum of the expense items on the 7363 not designated as fixed. They are Hired Labor, Feed Purchased, Farm Supplies, Machinery Re-

pairs, Fuel, Oil, and Grease, Electricity, Telephone, Miscellaneous, Seeds and Plants, Fertilizer and Lime, Machine Hire and Trucking, Auto Expenses, Veterinary and Medicine, Breeding Fees and Registration. These costs vary with production.

VARIABLE COST AS A PERCENT OF GROSS INCOME: VARIABLE COST is divided by GROSS FARM INCOME. This value indicates how much of your receipts are used to pay variable expenses. For an owner-operator, in general for livestock this should be 40-50 percent except hogs which should be in the 50 percent range. For a general crop farm this percent should be in the 30-40 percent range.

NET CASH INCOME: This is calculated by deducting the CASH EXPENSES from CASH RECEIPTS.

NET FARM INCOME: GROSS FARM INCOME - CASH EXPENSES - DEPRECIATION + Feeder Livestock Purchases provides this figure. Since Breeding Livestock Sales are included in the Gross Income Computation they thus affect the Net Farm Income.

TOTAL INVESTMENT: Inventory and depreciable items average values for the year are totaled to determine Total Capital Investment in the farm business. Add Beginning and Closing Inventory items (from the 7363) and divide by 2 to find average inventory values. Items to be included are Raised Breeding Livestock Market Livestock, Grain, Hay, Supplement, Supplies, Fertilizer, Purchased Breeding Livestock, Machinery and Equipment, Buildings and Fences, and the Current Agricultural Value of Land.

RETURN TO INVESTMENT: NET FARM INCOME + PAID INTEREST (from form 7363) - UNPAID OPERATOR AND FAMILY LABOR Provides this value.

PERCENT RETURN ON INVESTMENT: RETURN TO INVESTMENT is divided by TOTAL INVESTMENT to calculate this figure. Here the residual income (i.e., the income left after deducting unpaid operator and family labor) is designated as a percent return on investment. A zero return for management is assumed.

GROSS INCOME PER \$1,000 INVESTED: Gross Farm Income is divided by TOTAL INVESTMENT x \$1,000. This value indicates the rate at which capital is turned over on the farm. How well are you using your capital? Does it work for you on more than one "shift"?

Desirable Rates of Turnover Will Differ by Type of Farming

	<u>Poor</u>	<u>Better</u>	<u>Good</u>
Poultry	\$400	\$700	\$1,000
Dairy-Poultry	280	320	350
General Livestock	220	260	300
Dairy Cash Crop	220	260	300
Dairy	200	250	300
Corn-Hog	160	180	210
Dairy-Hog	200	250	300
Cash Crop	160	180	210

LABOR EFFICIENCY FACTOR: The LABOR EFFICIENCY FACTOR is computed by dividing the labor used on the farm (taken from page 1 of form 7363) by the amount that would have been used if the individual would have worked at the standard efficiency rate. (See page 10 of this pamphlet for further explanation.)

RETURN TO UNPAID OPERATOR AND FAMILY LABOR, MANAGEMENT AND PROFIT: This is calculated by adding UNPAID OPERATOR AND FAMILY LABOR TO MANAGEMENT INCOME AND PROFIT. The per hour figure is calculated by dividing the MAN-EQUIVALENT HOURS WORKED BY UNPAID OPERATOR AND FAMILY into RETURN TO UNPAID OPERATOR AND FAMILY LABOR, MANAGEMENT AND PROFIT. MAN-EQUIVALENT HOURS WORKED BY UNPAID OPERATOR AND FAMILY is computed by subtracting Hours of Hired Labor (from page 1 of form 7363) from NUMBER OF MAN-EQUIVALENT HOURS USED (see page 9 for explanation of this calculation.)

CASH RECEIPTS: All receipt items entered on form 7363 are copied over here.

TOTAL CASH RECEIPTS: The sum of all cash receipt items.

CASH EXPENSES: All expense items entered on page 1 of form 7363 are copied over here.

TOTAL CASH EXPENSES: The sum of all cash expense items.

CAPITAL GAIN: These entries are copied over from page 1 of form 7363.

TOTAL CAPITAL GAIN OR LOSS: The sum of the capital losses are subtracted from the sum of the capital gains to find this figure.

NET INVENTORY CHANGE: The difference between beginning and closing inventories is found and entered here as either a gain or a loss.

TOTAL INVENTORY CHANGE: The sum of the inventory losses are subtracted from the sum of the inventory gains to find this total.

DEPRECIATION: The entries on form 7363 under depreciation are copied over here.

TOTAL DEPRECIATION: The sum of all depreciation entries.

CAPITAL INVESTMENT: The beginning inventory and closing inventory items from page 1 of form 7363 are added together and divided by 2 to find the capital investment in each of the categories.

TOTAL CAPITAL INVESTMENT: The CAPITAL INVESTMENT items are added together to find this calculation.

RATIO ANALYSIS OF FARM AND ENTERPRISES

The overall farm, all crops, and, if detailed analysis is requested, each of the enterprises are analyzed by ratios to determine profit margin, turnover of assets, and returns on investment. Each of the ratio calculations is explained below along with a brief explanation of how the ratio may be used.

- A. MANAGEMENT INCOME AND PROFIT + INTEREST/GROSS INCOME: The MANAGEMENT INCOME AND PROFIT figure + PAID INTEREST + INTEREST NOT CHARGED from the farm or enterprise in question is divided by the appropriate GROSS INCOME FIGURE (GROSS FARM INCOME, VALUE OF ALL CROPS, or VALUE OF ANY ENTERPRISE). This ratio shows how much profit is made on each dollar of sales.
- B. GROSS INCOME/TOTAL INVESTMENT: The appropriate GROSS INCOME figure described above is divided by your reported TOTAL INVESTMENT for the appropriate enterprise (from page 3 of form 7363). This ratio will tell you how many dollars of sales are generated from each dollar of assets you have for the farm or a particular enterprise.
- C. MANAGEMENT INCOME AND PROFIT + INTEREST/TOTAL INVESTMENT: MANAGEMENT INCOME AND PROFIT + PAID INTEREST + INTEREST NOT CHARGED for the enterprise or overall farm is divided by the amount of Total Investment you have in that enterprise or overall farm. This ratio can also be found by multiplying the ratio described in A above by the ratio described in B above. This ratio tells how much profit is generated for each dollar you have invested (owned plus debt capital).

These ratios don't mean much by themselves, but when you compare them with previous years of the same farm or enterprise, with state averages, and particularly with each other, you can see how your enterprise is doing in comparison with others on your farm at present, on your farm in the past, and on other farms in the state.

LABOR EFFICIENCY

REPORTED LABOR USED ON FARM: Each of these entries is copied over from page 1 of form 7363.

NUMBER OF MAN-EQUIVALENT HOURS USED: Hours of operator labor + .8 times the number of hours of unpaid labor done by wife and family over 14 + .5 times hours of unpaid family labor under 14 + hours of hired labor. All the hour figures used in this calculation are from page 1 of form 7363.

NUMBER OF PMWU USED: PMWU is the abbreviation for Productive Man Work Unit and represents one 10 hour day. It is calculated by dividing the number of MAN-EQUIVALENT HOURS USED by 10.

NUMBER OF MAN-YEAR EQUIVALENTS USED: Number of PMWU used divided by 300.

VALUE OF OPERATOR LABOR USED: Hours of Operator Labor used (from page 1 of form 7363) times reported value per hour.

VALUE OF UNPAID FAMILY LABOR USED: Hours of unpaid wife worked times reported value per hour + hours of unpaid family labor over 14 times reported value per hour + hours of unpaid family labor under 14 times value per hour. All these value and hours are from page 1 of form 7363.

VALUE OF HIRED LABOR USED: This figure is copied from page 1 of form 7363.

VALUE OF TOTAL LABOR: VALUE OF OPERATOR LABOR USED + VALUE OF UNPAID FAMILY LABOR USED + VALUE OF HIRED LABOR USED.

VALUE OF LABOR PER MAN HOUR EQUIVALENT: VALUE OF TOTAL LABOR divided by NUMBER OF MAN-EQUIVALENT HOURS USED.

VALUE OF LABOR PER PMWU: VALUE OF TOTAL LABOR divided by NUMBER OF PMWU USED.

VALUE OF LABOR PER MAN-YEAR EQUIVALENT: VALUE OF TOTAL LABOR divided by NUMBER OF MAN-YEAR EQUIVALENTS USED.

PRODUCTIVE MAN WORK UNITS CHART: This chart explains the number of work units used on each enterprise on your farm.

ITEM: Under this heading are printed the enterprise categories analyzed on your farm.

STANDARD PMWU: (Per Unit Standard) - For each enterprise, a standard number of Productive Man Work Units per acre or unit of livestock is available (see pages 10, 11, and 12). This standard is listed here.

Total Standard Hours - For each enterprise, the standard percent is multiplied by the number of units in the enterprise. This gives the number of PMWU that would have been used in the enterprise if labor was of standard efficiency.

Labor Efficiency Factor: The total standard PMWU for all enterprises are added together and the total is compared to the total number of hours that you reported used on page 1 of form 7363. From this comparison is developed the Labor Efficiency Factor.

$$\text{Labor Efficiency Factor} = \frac{\text{Standard PMWU} \times \text{Number of Units}}{\text{Reported PMWU on page 1}}$$

If you were able to care for more units per hour than the standard, this factor will be larger than 1. For example, if you reported 1,000 hours used and the standard PMWU x Number of Units sums to 1,250 hours, the labor efficiency factor will be 1.25.

Standard Labor Adjustment Factor: This is the reciprocal of the labor efficiency factor, (i.e., 1 divided by the Labor Efficiency Factor). For the above example, it is 1 divided by 1.25 = .80.

Adjusted Standard PMWU: The unit and the total figures are obtained by multiplying the standard PMWU for each enterprise by the Standard Labor Adjustment Factor. This will change all the standard figures to fit your particular farm operation. For example, if you actually used less hours than the standard indicates, the standards are decreased to represent your farm situation. This adjusted figure is used in all labor efficiency and labor cost calculations for operations that did not report their own labor figures in column 3 of page 2 and page 4.

Individual PMWU: If you did report your own labor figures in column 3 of page 2 and page 4, these figures are listed under this heading. The total figures are found by multiplying the PMWU listed per unit by the number of units in the enterprise.

Individual Labor Adjustment Factor: The total individual PMWU from each enterprise are added up and compared to the number of hours that you actually used as reported on page 1 of form 7363. The Individual Labor Adjustment Factor is a result of this comparison.

$$\text{Individual Labor Adjustment Factor} = \frac{\text{Hours reported used on page 1}}{\text{Reported Individual Labor Factors} \times \text{number of units}}$$

Adjusted Individual PMWU: The unit and the total figures are found by multiplying your Individual PMWU by the Individual Labor Adjustment Factor. This will correct your reported labor factors to account for the labor you reported used on page 1 of form 7363. This adjusted figure will be used in all labor efficiency and labor cost calculations.

Standard PMWU (Productive Man Work Units) for various farm enterprises.

<u>Code</u>	<u>Enterprise</u>
01	Corn-grain PMWU equals Acres of Corn x .5
02	Soybeans-PMWU equals Acres of Soybeans x .4
03	Oats and/or Speltz-PMWU equals Acres of Oats x .2

<u>Code</u>	<u>Enterprise</u>
04	Wheat-PMWU equals Acres of Wheat x .4
05	Barley-PMWU equals Acres of Barley x .4
06	Grain Sorghum-PMWU equals Acres of Sorghum x .5
07	No enterprise coded 07
08	No enterprise coded 08
09	Other Grain-PMWU equals Acres of Other x .5
10-19	Hay-PMWU equals Acres of Alfalfa hay (10) + Clover Mixed hay (11) + Other hay (19) x .9
20	Green Chop-PMWU equals Acres of Green Chop x .5
21	Corn Silage-PMWU equals Acres of Corn Silage x .8
22	Haylage-PMWU equals Acres of Haylage x .5
23	Direct Cut Grass Silage-22 percent D.M. - PMWU equals Acres of Grass Silage x .5
24	Direct Cut Grass Silage-30 percent D.M. - PMWU equals Acres of Grass Silage x .5
25	Other Silage-PMWU equals Acres of Other x .7
26	Cabbage-PMWU equals Acres of Cabbage x 7.0
27	Potatoes-PMWU equals Acres of Potatoes x 5.0
28	Grapes-PMWU equals Acres of Grapes x 24.0
29	Carrots-PMWU equals Acres of Carrots x 3.0
30	Tobacco-PMWU equals Acres of Tobacco x 30.0
31	Sugar Beets-PMWU equals Acres of Beets x 2.2
32	Tomatoes-PMWU equals Acres of Tomatoes x 22.0
33	Pickles-PMWU equals Acres of Pickles x 10.0
34	Popcorn-PMWU equals Acres of Popcorn x .5
35	Sweetcorn-PMWU equals Acres of Sweetcorn x 2.0
36	Seedcorn-PMWU equals Acres of Seedcorn x .4
37	Strawberries-PMWU equals Acres of Strawberries x 25.0
38	Cucumber-PMWU equals Acres of Cucumbers x 10.0
39	Other Special Crops-PMWU equals Acres of Spe- cial x 10.0
40	Rotation Pasture-PMWU equals Acres of Pasture x .2
42	Permanent Pastures-PMWU equals Acres of Pas- tures x .1
44	Diverted Acres-PMWU equals Acres of Diverted Acres x .2
49	Other Land-PMWU equals Acres of Other x .1

(For farms where the livestock is on a share basis, the numbers shown on form 7363 (page 4) have to be increased to show the correct PMWU. Multiply by (one divided by the percent shown) to get the correct PMWU. For example, if operator share is 50%, multiply by 2. If 25%, multiply by 4.

51	Dairy-PMWU equals Average No. of Dairy Cows x 6.0 + Average No. of heifers in inventory x 1.5 + Average No. Bulls in inventory x 2.0
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Code

Enterprise

- 52 Swine Farrowing-PMWU equals litters x .7 + Average No. of boars x 3.0
Swine Finishing-PMWU equals net hog weight gained x .72. The net hog weight gained is calculated by adding the weight of market hogs sold + the weight of feeder pigs and shoats in ending inventory-the weight of feeder pigs purchased-the weight of shoats and feeder pigs in beginning inventory. This sum is then divided by 1,000.
- 53 Beef Feeder-PMWU equals net cattle weight gained x 1.0 (The net cattle weight gained is calculated by adding the weight of beef feeders sold + the weight of beef feeders in ending inventory-the weight of beef feeders purchased-the weight of beef feeders beginning inventory. This sum is then divided by 1,000. One productive man work unit is assumed to be required for each 1,000 pounds produced).
- 54 Beef Cow-PMWU equals No. of cows bred x 1.2 + average No. of replacement heifers x 1.0 + average No. of bulls x 2.0
- 55 Sheep: PMWU equals No. of Fwes exposed x .6 + net lamb weight gained x .4 (Net lamb weight gained is calculated by adding the weight of lambs sold + the weight of lambs in ending inventory - the weight of lambs purchased - the weight of lambs in beginning inventory. This sum is then divided by 100).
- 56 Poultry-Layers: PMWU equals Average no. of laying hens, x .015.
Broilers: PMWU equals (lbs. Broilers Sold ÷ 1000) x .278
Turkeys: PMWU equals (lbs. Turkeys sold ÷ 1000) x .43.

- A. CROP PRODUCTION: All entries under the column acres are copied from page 2 of form 7363. Yield is calculated by dividing total production for each enterprise (from column 5, page 2 of form 7363) by the number of acres of that enterprise. These include all crops except special crops, pasture, diverted acres and woodland.
- B. GENERAL CROP ACRES: This is calculated by adding the total acres of each general crop produced (those between 01 and 25).

CODES FOR ENTERPRISE ANALYSIS

	<u>CROPS</u>	24	Direct Cut Grass Silage 30% Moisture
00	All Crops	25	Other Silage
01	Corn	26	Cabbage
02	Soybeans	27	Potatoes
03	Oats and/or Speltz	28	Grapes
04	Wheat	29	Carrots
05	Barley	30	Tobacco
06	Grain Sorghum	31	Sugar Beets
09	Other Grain	32	Tomatoes
10	Alfalfa Hay	33	Pickles
11	Clover, Mixed Hay	34	Popcorn
12	Dehydrated Alfalfa	35	Sweet Corn
19	Other Hay	36	Seed Corn
20	Green Chop	37	Strawberries
21	Corn Silage	38	Cucumbers
22	Havlage	40	Rotation Pasture
23	Direct Cut Grass Silage 22% Moisture	42	Permanent Pasture
		44	Diverted Acres

- C. SPECIAL CROP ACRES: This is calculated by adding the total acres of each special crop produced (those coded between 26 and 39). This excludes those crops designated as general crops (those with codes between 01 and 25).
- D. TOTAL HARVESTED CROP ACRES: This is calculated by adding the total acres of each crop produced. All crops coded from 01 to 39 plus diverted acreage (code 44). Rotation Pasture and Permanent Pasture is excluded.
- E. VALUE OF GENERAL CROPS: The total production in bushels or tons (from column 6 page 2 of form 7363) of each general crop is multiplied by the price per bushel or ton (from column 2 page 2 of form 7363 or from standards) for each general crop. Pasture and special crops are omitted from this calculation.
- F. VALUE OF SPECIAL CROPS: The dollars of total production for each of the special crops (from column 5 page 2 of form 7363) are added together to find this figure. Pasture and General Crops are omitted from this calculation.

- G. VALUE OF ALL CROPS: This figure is found by adding VALUE OF GENERAL CROPS plus VALUE OF SPECIAL CROPS plus Government Crop Payments (from column 1 page 1 of form 7363). Pasture has been excluded from this figure.
- H. GENERAL CROP PRODUCTION VALUE PER ACRE: This figure is found by dividing VALUE OF GENERAL CROPS by GENERAL CROP ACRES.
- I. SPECIAL CROP PRODUCTION VALUE PER ACRE: This calculation is done by dividing VALUE OF SPECIAL CROPS by SPECIAL CROP ACRES.
- J. ALL CROP PRODUCTION VALUE PER ACRE: This is found by dividing VALUE OF ALL CROPS by TOTAL HARVESTED CROP ACRES.
- K. DIVERTED ACRES: This figure is copied directly from Column 4, row T, page 2 of form 7363.
- L. CROP ACRES PAYMENT: This value is copied directly from column 1, row N, page 1 of form 7363.
- M. PERCENT OF GENERAL CROPS IN CORN AND SOYBEANS: This figure is calculated by dividing the sum of Total Acres of Corn + Total Acres of Corn Silage + Total Acres of Soybeans (from column 4 page 2 of form 7363) by GENERAL CROP ACRES.
- N. PERCENT TOTAL TILLABLE ACRES IN CORN AND SOYBEANS: This figure is found by dividing the sum of Total Acres of Corn + Total Acres of Corn Silage + Total Acres of Soybeans (from column 4 page 2 of form 7363) by TOTAL TILLABLE ACRES. TOTAL TILLABLE ACRES is found by adding TOTAL HARVESTED CROP ACRES + Acres of Rotation Pasture (from column 4 page 2 of form 7363.)
- O. FERTILIZER AND LIME COST PER ACRE: (This includes all tillable and permanent pasture acreage). This value is calculated by dividing the Fertilizer and Lime Expense figure (from page 1 of form 7363) by the sum of TOTAL HARVESTED CROP ACRES + Rotation Pasture acreage (taken from page 2 of form 7363) + Permanent Pasture acreage (taken from page 2 of form 7363) - DIVERTED ACRES. This value should generally be higher on farms having a high percentage of tillable acres because pasture receives much lower applications of fertilizers. (Diverted Acres excluded).
- P. MACHINERY INVESTMENT PER CROP ACRE: This figure is found by dividing AVERAGE INVESTMENT IN MACHINERY by TOTAL TILLABLE ACRES (see N. above). AVERAGE INVESTMENT IN MACHINERY is found by adding Beginning and Ending Machinery and Equipment Inventory (from page 1 of form 7363) and dividing by 2.
- Q. TOTAL POWER AND MACHINERY COST: This is calculated by summing the Expense Items from page 1 of form 7363 of Machinery Repairs, Fuel, Oil, Grease, Machine Hire and Trucking, and Auto Expense, plus Machinery and Equipment Depreciation + 6% of AVERAGE INVESTMENT IN MACHINERY (see calculation P above) - Custom Work Receipts (from column 1 page 1 of form 7363). Custom Work Receipts are deducted to remove those cost items which were not incurred by the farm business. This figure may include a value for operator's labor and thereby deduct too much. To correct this you must 1) have subtracted operator's labor from Custom Work Receipts when you entered it in

column 1 page 1 of form 7363, or 2) you may change the figure on the print-out to reflect the labor in Custom Work Receipts by adding the Value of Labor Used in Custom Work to TOTAL POWER AND MACHINERY COST. A figure of .15 times Custom Work Receipts may be used as a rule of thumb for determining the Value of Labor Used in Custom Work.

- R. MACHINERY COST PER CROP ACRE: This figure is found by dividing TOTAL POWER AND MACHINERY COST by TOTAL TILLABLE ACRES (explained in N. above).
- S. TOTAL VALUE OF FEED FED TO ALL LIVESTOCK ENTERPRISES: This figure is found by multiplying the bushels, tons, or acres of each type of grown feed fed to livestock (from column 10 page 2 of form 7363) by the value of that feed per bushel, tons or acres and then adding these grown feed values to the value of purchased feeds (from page 2 of form 7363).

Standard Prices

If no value per bushel or ton is entered in column 2, page 2 of form 7363, the standard value listed below will be used.

01 Corn	\$1.10 per bushel
02 Soybeans	3.10 per bushel
03 Oats or Speltz	.65 per bushel
04 Wheat	1.30 per bushel
05 Barley	.97 per bushel
06 Grain Sorghum	1.85 per cwt.
09 Other Grain	1.00 per bushel
10 Alfalfa Hay	25.00 per ton
11 Clover, Mixed Hay	20.00 per ton
19 Other Hay	20.00 per ton
20 Green Chop	5.00 per ton
21 Corn Silage	9.00 per ton
22 Haylage	16.50 per ton
23 Direct Cut Grass Silage 22% Dry Matter	6.25 per ton
24 Direct Cut Grass Silage 30% Dry Matter	8.25 per ton
25 Other Silage	8.00 per ton
40 Rotation Pasture	12.00 per acre
42 Permanent Pasture	8.00 per acre

- T. VALUE OF NET LIVESTOCK INCREASE: This value is calculated differently depending upon whether the individual wants only total farm analysis or whether he wants detailed analysis.

For those wanting only total farm analysis, the information is all taken from page 1 of form 7363. It is calculated by summing the receipts of milk and cream, poultry and eggs, wool, and other livestock products, breeding fees received, sale of market livestock + capital gains on raised breeding livestock and purchased breeding livestock + or - the change in raised breeding livestock inventory and market livestock inventory - capital losses on purchased breeding livestock - feeder livestock purchases. For home consumed products to be included, they must have been included in the sales figures reported in column 1 of form 7363 or in the case of consumed breeding livestock, the Capital Gains section of form 7363.

For those wanting detailed analysis, the information is taken from page 1 and page 4 of form 7363. It is calculated by summing the receipts of milk and cream, poultry and eggs, wool, other livestock products, and breeding fees received from page 1 of the 7363. To this is added the difference between (Ending Inventory value + Sales value) - (Beginning Inventory value + Purchases value) for all livestock enterprises from page 4 of form 7363.

The resulting value, by either method of calculation, represents the total net dollars of livestock and livestock products produced during the year.

- U. RETURNS PER \$ FEED FED TO ALL LIVESTOCK ENTERPRISES: This is calculated by dividing VALUE OF NET LIVESTOCK INCREASE by TOTAL VALUE OF FEED FED TO ALL LIVESTOCK ENTERPRISES. Returns per dollar of feed fed should pay for the feed, labor and overhead (taxes, interest, depreciation and repair) on buildings and equipment required by the livestock. Some livestock enterprises require more costly buildings and equipment and involve more labor than others. When arriving at standards for a particular farm, consider relative portion of total feed consumed by each class of livestock. For example, if half of the feed went to dairy cattle and half to hogs, the expected standard return should be about half-way between \$2.00 and \$1.60 or \$1.80.

The necessary return will vary as costs of feed and labor fluctuate.

Desirable Returns Per \$1.00 of Feed Fed Varies By
Type of Enterprise

Dairy Cattle	\$2.00	Hogs	\$1.60
Beef Breeding Cattle	1.30	Sheep	1.50
Fattening Cattle	1.25	Poultry	1.95

CROP SUMMARIES

The following calculation are the same for each of the crop analyses, except the analysis of ALL CROPS (Coded 00). These different calculations are explained on page 18.

ACRE INFORMATION

The total for each of the calculations is described below. The per acre calculations are found by dividing the total by the number of acres of that crop as listed in column 4, page 2 of form 7363.

- A. X PRODUCED: This figure (in bushels, tons, or dollars) is copied directly from column 5 page 2 of form 7363. This is not listed for ALL CROPS analysis (code 00).
- B. POUNDS PRODUCED: X PRODUCED is multiplied by the number of pounds per bushel or by 2,000 if in tons. Pasture and special crops will not have a value for this calculation. This is not listed for ALL CROPS analysis (code 00).
- C. PRODUCTIVE MAN WORK UNITS: ADJUSTED STANDARD PMWU or ADJUSTED INDIVIDUAL PMWU per acre (see page 10 for explanation) is multiplied by the number of acres of the crop as reported in column 4, page 2 of form 7363.
- D. VALUE OF LABOR USED: This value is found by multiplying PRODUCTIVE MAN WORK UNITS used in the enterprise by VALUE OF LABOR PER PMWU (explained on page 9).
- E. VALUE OF PRODUCTION: This value is found by multiplying operators share of the bushels or tons produced in the enterprise (from column 6, page 2 of form 7363) by the value per bushel or ton (as entered in column 2, page 2 of form 7363 or a standard). For pasture this value will be the product of Pasture Acres Used (column 10, page 2 of form 7363) x Value Per Acre (under column 9, page 2 of form 7363). For Special Crops, this value will be copied over from column 5, page 2 of form 7363. For Diverted Acres, it will be copied directly from Government Crop Payments (Row N, Column 1, page 1 of form 7363).

Expenses

- F. CASH: These values are copied over from page 3 of form 7363.
- G. TOTAL CASH EXPENSES: The sum of all cash expenses.
- H. DEPRECIATION: These values are copied over from page 3 of form 7363.
- I. TOTAL DEPRECIATION: The sum of all depreciation expense items.
- J. UNPAID OPERATOR AND FAMILY LABOR: VALUE OF LABOR USED minus HIRED LABOR EXPENSE gives this figure.
- K. INTEREST NOT CHARGED: This figure is found by multiplying Investment (from page 3 of form 7363) by 6% and then subtracting PAID INTEREST EXPENSE.

- L. TOTAL EXPENSES: This is the sum of TOTAL CASH EXPENSE + TOTAL DEPRECIATION EXPENSE + UNPAID OPERATOR AND FAMILY LABOR + INTEREST NOT CHARGED.
- M. MANAGEMENT INCOME AND PROFIT: This figure is found by subtracting TOTAL EXPENSES From VALUE OF PRODUCTION.
- N. VALUE OF PRODUCTION - CASH EXPENSES: This value is found by subtracting CASH EXPENSES from VALUE OF PRODUCTION.
- O. TOTAL INVESTMENT: This value is for the enterprise in question and is copied from page 3 of form 7363.
- P. RETURN TO INVESTMENT: This figure is found by adding MANAGEMENT INCOME AND PROFIT and INTEREST EXPENSE (PAID INTEREST EXPENSE + INTEREST NOT CHARGED).
- Q. PERCENT RETURN ON INVESTMENT: This figure is found by dividing RETURN TO INVESTMENT by TOTAL INVESTMENT and multiplying by 100.
- R. RETURN TO UNPAID OPERATOR AND FAMILY LABOR, MANAGEMENT AND PROFIT: The total figure is found by adding UNPAID OPERATOR AND FAMILY LABOR EXPENSE to MANAGEMENT INCOME AND PROFIT. The per hour figure is found by dividing the total figure by HOURS OF UNPAID OPERATOR AND FAMILY LABOR. HOURS OF UNPAID OPERATOR AND FAMILY LABOR is calculated by multiplying PRODUCTIVE MAN WORK UNITS by 10 and subtracting HIRED LABOR HOURS for the enterprise. HIRED LABOR HOURS is calculated by dividing Hired Labor Expense for the enterprise (from page 3 of form 7363) by VALUE OF HIRED LABOR PER HOUR. VALUE OF HIRED LABOR PER HOUR is calculated by dividing total Hired Labor Expense (from page 1 of form 7363) by Hired Labor Hours (from page 1 of form 7363).

CROP INDIVIDUAL ENTERPRISE EXPLANATION

ALL CROPS

This is for the code 00 in which all crops are analyzed together.

GENERAL INFORMATION

CROP: Each of the crops included in this analysis is listed here with the acreage (from column 4, page 2 of form 7363) and yield per acre. Yield per acre is found by dividing total production of each crop (from column 5, page 2 of form 7363) by the number of acres of each crop (from column 4, page 2, of form 7363). Yield per acre for pasture and special crops will be omitted. Woodland and other land is omitted.

All other calculations for the analysis of All Crops are explained under Crop Summaries.

All the other crops have the following calculations.

- A. PRODUCTION UNIT: This is the type of unit which the crop is measured in such as bushels or tons.

- B. POUNDS PER X: This gives the number of pounds that is in a production unit described in A above.
- C. ACRES: This is copied from column 4, page 2 of form 7363.
- D. VALUE PER X: This is the value per production unit described in A above. It is either the value entered in column 2, page 2 of form 7363 or, if you have not entered a value, a standard value.
- E. VALUE PER POUND: This value is found by dividing VALUE PER X by POUNDS PER X.

LIVESTOCK SUMMARIES

(Calculations common to all Livestock Enterprises)

In all livestock enterprise summaries, the calculations following the heading "PER COW INFORMATION", "PER CWT. OF MILK PRODUCED", or "PER CWT. INFORMATION" are computed exactly the same, except for a few calculations in the dairy and milk summaries. These exceptions will be explained in the dairy and milk summary explanation.

The calculations following "PER _____ X _____ INFORMATION" are explained below. The remainder of the calculations for each enterprise analysis follow this explanation under the various enterprise headings.

The calculations explained here are for the TOTAL amount of each item. Per CWT. figures are calculated by dividing the total amount of each item by the POUNDS OF _____ X _____ PRODUCED (The enterprise in question such as pork, beef or milk) divided by 100 (to convert to CWT.). POUNDS OF _____ X _____ PRODUCED is explained under the enterprise sections that follow.

PER CWT. INFORMATION

- A. PRODUCTIVE MAN WORK UNITS: ADJUSTED STANDARD PMWU or ADJUSTED INDIVIDUAL PMWU for each type of animal in the enterprise (see page 10 for explanation of these items) is multiplied by the number of each type of animal in the enterprise. NUMBER OF ANIMALS by type in the enterprise is calculated by adding the NUMBER OF _____ X _____ (each type of animal) in beginning inventory to NUMBER OF _____ X _____ in ending inventory and dividing by 2. For example, to find the Number of Animals in a swine farrowing and feeding enterprise, Add the Number of Sows and Gilts in Beginning Inventory to the number in Ending Inventory and divide by two. This average is multiplied by the appropriate adjusted PMWU figure to find number of PMWU used for sows and gilts. The same calculation is performed for Boars and for feeder pigs. These PMWU figures are then added together to give the total PMWU used in the Swine enterprise.
- B. VALUE OF LABOR USED*: PRODUCTIVE MAN WORK UNITS used in the enterprise is multiplied by VALUE OF LABOR PER PMWU (see page 9) to give this figure.
- C. VALUE OF _____ X _____ PRODUCTION: For each enterprise this value is found by adding the various types of livestock sold from that enterprise plus the value of animal products sold from the enterprise plus change in enterprise inventory value (Ending Animal Inventory Value minus Beginning Animal Inventory Value) minus enterprise livestock purchases.

* Headings followed by (*) are calculated exactly the same for crop enterprises. These calculations have been explained under Crop Summaries, but are explained again to avoid confusion.

Expenses

CASH*: Copied over from page 3 of form 7363.

TOTAL CASH EXPENSES*: The sum of all cash expenses. Feeder livestock purchases are not included in this figure.

DEPRECIATION*: Copied over from page 3 of form 7363.

TOTAL DEPRECIATION*: The sum of depreciation items.

UNPAID OPERATOR AND FAMILY LABOR*: VALUE OF LABOR USED minus HIRED LABOR EXPENSE.

INTEREST NOT CHARGED*: Investment (from page 3 of form 7363) times 6% minus PAID INTEREST EXPENSE.

HOME GROWN FEEDS: Number of bushels or tons of feed fed to enterprise times the value per bushel or ton plus the number of acres of pasture used by enterprise times the value per acre for pasture.

TOTAL EXPENSES: TOTAL CASH EXPENSE + TOTAL DEPRECIATION EXPENSE + UNPAID OPERATOR AND FAMILY LABOR + INTEREST NOT CHARGED + HOME GROWN FEEDS gives this total value.

MANAGEMENT INCOME AND PROFIT*: VALUE OF ENTERPRISE PRODUCTION minus TOTAL EXPENSES gives this figure.

VALUE OF PRODUCTION - CASH EXPENSES *: TOTAL CASH EXPENSES are subtracted from VALUE OF PRODUCTION for the enterprise to give this value.

TOTAL INVESTMENT*: This enterprise investment figure is copied from page 3 of form 7363.

RETURN TO INVESTMENT*: MANAGEMENT INCOME AND PROFIT plus PAID INTEREST EXPENSE plus INTEREST NOT CHARGED for the enterprise gives this figure.

PERCENT RETURN ON INVESTMENT*: This figure is calculated by dividing RETURN TO INVESTMENT by TOTAL INVESTMENT and multiplying by 100.

TOTAL FEED COST: VALUE OF SUPPLEMENT plus VALUE OF GRAIN plus VALUE OF ROUGHAGE gives this figure.

Feed Required

POUNDS OF SUPPLEMENT and VALUE OF SUPPLEMENT: Copied from enterprise column, page 2 of form 7363.

POUNDS OF GRAIN: The sum of the pounds of home grown grain fed to the enterprise in question and purchased grain fed to that enterprise. Pounds is determined by multiplying bushels of each grain times pounds per bushel of each type of grain.

Headings followed by () are calculated exactly the same for crop enterprises. These calculations have been explained under Crop Summaries but are explained again to avoid confusion.

POUNDS OF ROUGHAGE--HAY EQUIVALENT: The pounds of the different forms of grown and purchased roughage fed to the enterprise in question are converted to pounds of hay equivalent and added together. Hay equivalent is found by multiplying the pounds of the roughage in question by its hay equivalent factor (see the table below). This is the pounds of dry hay that the roughage is equal to in feed value.

HAY EQUIVALENT FACTORS

Green Chop	18% Dry Matter	1/5
Direct Cut Silage	22% Dry Matter	1/4
Wilted Grass Silage	30% Dry Matter	1/3
Corn Silage	30% Dry Matter	1/3
Haylage	45% Dry Matter	1/2
Other Silage		1/3

Note that pasture is left out of this calculation.

VALUE OF GRAIN: This figure is found by multiplying the bushels of each type of raised grain fed to the enterprise in question (from page 2 of form 7363) times the value per bushel and adding this to the value of purchased grain fed to the enterprise (from page 2 of form 7363).

VALUE OF ROUGHAGES: This is found by multiplying the tons of each type of roughage fed to the enterprise in question times the value per ton of each type of roughage, plus the value per acre of pasture times the number of pasture acres fed to the enterprise in question plus the value of purchased roughage fed to the enterprise.

RETURN TO UNPAID OPERATOR AND FAMILY LABOR, MANAGEMENT AND PROFIT*: The total figure is calculated by adding UNPAID OPERATOR AND FAMILY LABOR EXPENSE to MANAGEMENT INCOME AND PROFIT. The per hour figure is calculated by dividing the total figure by HOURS OF UNPAID OPERATOR AND FAMILY LABOR. HOURS OF UNPAID OPERATOR AND FAMILY LABOR is calculated by multiplying PRODUCTIVE MAN WORK UNITS x 10 and subtracting HIRED LABOR HOURS for the enterprise. HIRED LABOR HOURS is calculated by dividing Hired Labor Expense for the enterprise (from page 3 of form 7363) by VALUE OF HIRED LABOR PER HOUR. VALUE OF HIRED LABOR PER HOUR is calculated by dividing Total Hired Labor Expense (from page 1 of form 7363) by Hired Labor Hours (from page 1 of form 7363).

Headings followed by () are calculated exactly the same for crop enterprises. These calculations have been explained under Crop Summaries, but are explained again to avoid confusion.

INDIVIDUAL LIVESTOCK ENTERPRISE ANALYSIS EXPLANATIONS

DAIRY SUMMARY

- A. NUMBER OF COWS: Copied from form 7363.
- B. NUMBER OF COWS PER MAN EQUIVALENT: Number of cows divided by NUMBER OF MAN-YEAR EQUIVALENTS used in the dairy enterprise. NUMBER OF MAN-YEAR EQUIVALENTS USED is calculated by dividing PRODUCTIVE MAN WORK UNITS used in the dairy enterprise (see page 9) by 300.
- C. DAIRY RETURNS PER \$ FEED FED: TOTAL VALUE OF PRODUCTION from the dairy enterprise (F below) divided by the TOTAL FEED COSTS of the dairy enterprise (page 21).

Exentions to livestock summary explanation.

VALUE OF PRODUCTION

- D. DAIRY INCREASE: Ending Inventory + Dairy Cattle Sales or transfers - Beginning Inventory - Dairy Cattle purchases (all these figures are from page 4 form 7363).
- E. MILK SOLD: Copied from page 1 of form 7363.
- F. TOTAL VALUE OF PRODUCTION: This value is found by adding DAIRY INCREASE + MILK SOLD.

MILK SUMMARY

This summary is for milk and cream sales only. Dairy animal sales, purchases, and changes in inventory are left out of all the calculations.

- A. NUMBER OF COWS: Copied from Average Number of Cows in Herd on form 7363.
- B. POUNDS OF 3.5% MILK SOLD: This is calculated by multiplying the pounds of milk sold by the average butterfat test and then dividing by 3.5%.
- C. POUNDS OF 3.5% MILK SOLD PER COW: This is calculated by dividing POUNDS OF 3.5% MILK SOLD by NUMBER OF COWS. 13,000 pounds is acceptable but your goal should be 14,000 pounds or more.
- D. POUNDS OF MILK SOLD PER MAN EQUIVALENT: This is calculated by dividing POUNDS OF 3.5% MILK SOLD by NUMBER OF MAN-YEAR EQUIVALENTS USED in dairy (see page 9).
- E. VALUE OF MILK SOLD PER COW: This is calculated by dividing MILK SOLD by NUMBER OF COWS.
- F. FEED COSTS FOR MILK PER COW: FEED COSTS FOR MILK divided by NUMBER OF COWS. FEED COSTS FOR MILK is found by multiplying the TOTAL FEED COSTS for dairy by PERCENT OF DAIRY FEED CHARGED TO MILK PRODUCTION + 100. (see I below)

- G. MILK SALES AS A % OF GROSS FARM INCOME: This percentage is found by dividing MILK SOLD by GROSS FARM INCOME (explained on page 4).
- H. MILK SALES AS A % OF DAIRY VALUE: This percentage is found by dividing MILK SOLD by TOTAL VALUE OF PRODUCTION for the dairy enterprise (explained on page 23).
- I. PERCENT OF DAIRY FEED CHARGED TO MILK PRODUCTION: This is equal to the percent that MILK SOLD is of TOTAL VALUE OF PRODUCTION for dairy. It is calculated by dividing MILK SOLD by TOTAL VALUE OF PRODUCTION from dairy x 100.
- J. EXPENSES: All expense calculations are found by multiplying the expense figures from the Dairy Summary by (MILK SOLD divided by TOTAL VALUE OF PRODUCTION from dairy).

Swine Detailed Analysis

- A. NUMBER OF SOWS AND GILTS: This figure is calculated by adding the beginning and ending inventories of sows and gilts and then dividing by 2. This gives the average number on hand during the year.
- B. NUMBER OF SOWS AND GILTS PER MAN EQUIVALENT: NUMBER OF SOWS AND GILTS divided by NUMBER OF MAN EQUIVALENTS USED IN SWINE. NUMBER OF MAN EQUIVALENTS USED IN SWINE is found by dividing PRODUCTIVE MAN WORK UNITS used in swine (see explanation on page 9) by 300.
- C. NUMBER OF LITTERS FARROWED: This is copied directly from page 4 of form 7363.
- D. TOTAL NUMBER OF PIGS WEANED: This figure is copied directly from page 4 of form 7363.
- E. NUMBER OF PIGS WEANED PER LITTER: This is calculated by dividing TOTAL NUMBER OF PIGS WEANED by NUMBER OF LITTERS FARROWED.
- F. POUNDS OF PORK PRODUCED: This is calculated by adding the weights of hogs in the Ending Inventory (sows, gilts, boars, shoats, or feeder pigs) and Sold (sows & boars, market hogs, feeder pigs) - the weight of Purchased hogs (sows & boars, feeder pigs) and Beginning Inventory (sows, gilts, boars, shoats or feeder pigs). The difference represents the pounds of pork produced during the year.
- G. POUNDS OF PORK PRODUCED PER MAN EQUIVALENT: This is calculated by dividing POUNDS OF PORK PRODUCED by NUMBER OF MAN EQUIVALENTS USED IN SWINE.
- H. RETURNS PER \$ FEED FED: This figure is calculated by dividing VALUE OF PORK PRODUCTION (explained on page 20) by TOTAL FEED COSTS (explained on page 21).

FEEDER PIGS SOLD OR MARKET HOGS SOLD

- I. NUMBER, POUNDS, VALUE: Each of these figures is copied directly from page 4 of form 7363.

- J. WT./PIG: Total Weight of Feeder Pigs or Market Hogs sold divided by number of feeder pigs or market hogs sold.
- K. VALUE/PIG: Total value of Feeder Pig or Market Hog sales divided by number of feeder pigs or market hogs sold.

BEEF FEEDING SUMMARY

GENERAL INFORMATION

- A. NUMBER OF FAT CATTLE SOLD: This figure is copied from page 4 of form 7363.
- B. NUMBER OF FAT CATTLE SOLD PER MAN EQUIVALENT: NUMBER OF FAT CATTLE SOLD divided by MAN EQUIVALENTS USED IN FEEDER CATTLE. MAN EQUIVALENTS USED IN FEEDER CATTLE is found by dividing PRODUCTIVE MAN WORK UNITS used in feeder cattle (see page 9) by 300.
- C. POUNDS OF BEEF PRODUCED: This figure is found by adding total weight in ending inventory + total weight sold - total weight of purchased or transferred - total weight of beginning inventory.
- D. POUNDS OF BEEF PRODUCED PER MAN EQUIVALENT: POUNDS OF BEEF PRODUCED divided by MAN EQUIVALENTS USED IN FEEDER CATTLE.
- E. PERCENT DEATH LOSS: This is calculated by dividing the number of animals which died by the sum of Beef Feeder Purchases number and Beef Feeder Beginning Inventory number.
- F. RETURNS PER \$ FEED FED: This value is calculated by dividing VALUE OF BEEF PRODUCED (explained on page 20) by TOTAL FEED COSTS (explained on page 21).

BEEF BREEDING SUMMARY

GENERAL INFORMATION

- A. NUMBER OF COWS BRED TO CALVE: This figure is copied from page 4 of form 7363.
- B. PERCENT CALF CROP: This figure is calculated by dividing NUMBER OF COWS BRED TO CALVE by NUMBER OF CALVES SAVED (from page 4 of form 7363).
- C. POUNDS OF BEEF PRODUCED: This is calculated by adding the weight of cows, bulls, heifers, and calves in Ending Inventory + the weight of the cows, bulls, heifers and calves Sold - the weight of Purchased cows, bulls, and heifers - the weight of cows, bulls, heifers, and calves in Beginning Inventory. The difference represents the Pounds of Beef Produced during the year.
- D. POUNDS OF BEEF PRODUCED PER COW: This is calculated by dividing the POUNDS OF BEEF PRODUCED by the AVERAGE NUMBER OF COWS. The AVERAGE NUMBER OF COWS is determined by adding the Beginning and Ending Inventory number and dividing by 2.

- E. RETURNS PER \$ FEED FED: This figure is calculated by dividing VALUE OF BEEF PRODUCED (explained on page 20) by TOTAL FEED COSTS (explained on page 21).

SHEEP SUMMARY

GENERAL INFORMATION

- A. AVERAGE NUMBER OF EWES: This figure is calculated by adding the number of ewes in beginning inventory to the number in ending inventory and dividing by 2.
- B. NUMBER OF EWES EXPOSED: This figure is copied from form 7363.
- C. LAMB CROP PER EWE EXPOSED: This is calculated by dividing the Number of Lambs Weaned (from form 7363) by the NUMBER OF EWES EXPOSED.
- D. POUNDS OF WOOL PER EWE: This is calculated by dividing the Pounds of Wool Sold (from form 7363) by the AVERAGE NUMBER OF EWES.
- E. GROSS INCOME PER EWE: This is calculated by dividing Value of LAMB, MUTTON, and WOOL PRODUCTION (explained on page 20) by AVERAGE NUMBER OF EWES.
- F. POUNDS OF LAMB AND MUTTON PRODUCED: This is calculated by adding the weight of Ewes, Rams, and Lambs in Ending Inventory and Sales of Ewes, Rams, and Lambs - the weight of Purchased Ewes, Rams, and Lambs - the weight of Ewes, Rams and Lambs in Beginning Inventory.
- G. POUNDS OF LAMB AND MUTTON PRODUCED PER MAN EQUIVALENT: POUNDS OF LAMB AND MUTTON PRODUCED divided by NUMBER OF MAN EQUIVALENTS USED FOR SHEEP. NUMBER OF MAN EQUIVALENTS USED FOR SHEEP is calculated by dividing PRODUCTIVE MAN WORK UNITS used for sheep (explained on page 9) by 300.
- H. RETURNS PER \$ FEED FED: Divide VALUE OF LAMB, MUTTON AND WOOL PRODUCTION (explained on page 20) by TOTAL FEED COSTS (explained on page 21).

POULTRY SUMMARY

GENERAL INFORMATION

- A. AVERAGE NUMBER OF HENS: This value is taken directly from form 7363.
- B. DOZENS OF EGGS SOLD: This value is taken directly from form 7363.
- C. EGGS SOLD PER HEN: This calculated by multiplying the number of DOZENS OF EGGS SOLD by 12 and dividing by the AVERAGE NUMBER OF HENS.
- D. NUMBER OF BROILERS SOLD: This value is taken directly from form 7363.

- E. POUNDS OF BROILERS SOLD: This value is taken directly from form 7363.
- F. NUMBER OF TURKEYS SOLD: This value is taken directly from form 7363.
- G. POUNDS OF TURKEYS SOLD: This value is taken directly from form 7363.
- H. VALUE OF POULTRY AND EGGS PRODUCED PER MAN EQUIVALENT: This figure is calculated by dividing TOTAL VALUE OF POULTRY AND EGGS (explained on page 20) by NUMBER OF MAN EQUIVALENTS USED IN POULTRY. NUMBER OF MAN EQUIVALENTS USED BY POULTRY is found by dividing PRODUCTIVE MAN WORK UNITS used in poultry (explained on page 9) by 300.