ESO-299

STANDARD OPERATING PROCEDURES AND GUIDELINES FOR THE OHIO STATE FARM BUSINESS ANALYSIS PROGRAM

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FOREWORD

This presentation is a compilation of present operating procedures and other documentation associated with the present operational status of the Ohio State Year End Farm Business Analysis Program. It is an improved revised and updated version of the original procedures manual published in 1973 with similar designs of acquainting the reader with the totality of the system and providing continuity during personnel changes. The computer program documentation and the computer programs themselves are maintained at the Public Services Computer Center.

The presentation is written as a series of guidelines and duty areas associated with the Ohio Farm Business Analysis Program and will be an excellent reference source when questions or problems arise. The 1975 operating year during which 1974 farm data were analyzed and summarized was, with no question, the most efficient and orderly operation since the inception of the Ohio Farm Business Analysis Program. More farms were analyzed than in any year since 1970, the first year the author was associated with the program. In addition, the turnaround time, or elapsed time in days from which a farm input form was received and an analysis sent back, was the shortest in history. The summaries, even though delayed by some computer problems and changes, and by the 1975 American Agricultural Economics Association meetings hosted by the Department of Agricultural Economics and Rural Sociology during August were still published and available by October 1, 1975.

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STANDARD OPERATING PROCEDURES

FOR THE

OHIO FARM BUSINESS ANALYSIS PROGRAM

The Ohio Farm Business Analysis Program is designed to evaluate farm business records of individual Ohio farmers. With the aid of a computer, income, expense, labor, and investment items are analyzed for the overall farm and each farm enterprise. Yearly summaries are then constructed and published from the data obtained through individual analyses. Persons submitting records for analysis are charged $25.00.

The program has remained relatively unchanged the past three years and has steadily improved during this time. There is still much room for improvement and complacency should not be tolerated. The program is implemented by the Department of Agricultural Economics primarily through area farm management agents, county agriculture agents, vocational agriculture teachers and farm business and planning analysis instructors. 643 farm records for the 1974 year were analyzed in 1975. A listing of farm records received by county and area is enclosed on page 65 of this publication.

Records analyzed for vocational agriculture teachers and farm business and planning analysis instructors are directed through the Agricultural Education Department at Ohio State. Payment is made to the Agriculture Economics Department at the end of the processing season. Records are normally returned by mail to extension agents or by hand to the Agriculture Education Department within 10 days of receipt by the Agriculture Economics Department.

After completion of the processing season, individual records are summarized into state summaries and in a few cases, area summaries, or other specifically requested summaries. Five summary publications including

dairy, dairy by herd size, general crop, swine and beef were printed for general distribution for the 1974 year. Types of summaries and numbers printed are listed on page 31.

Actual processing is done in a standard manner. Farm business operators enter their records on a printed data collection form (7363) with the aid of their area farm management agent, county agent, vo-ag teacher, or farm business and planning analysis instructor. That individual sends the completed input form 7363 along with payment to The Ohio State University for processing. The farms from the extension service are sent directly to the Department of Agricultural Economics while the farms from the vo-ag sector are sent to the Department of Agricultural Education which then forwards them to Ag. Econ. At the Agricultural Economics Department, farm numbers and payments are recorded. Data from the collection forms are punched onto computer cards by the Agricultural Economics Statistics Laboratory and are processed by computer in the University Hospital Computer Center at Starling-Loving Hall.

The output or individual analysis printout is obtained on four part or four copy computer paper. The original or first copy is given to the farmer, while one copy goes to the individual responsible for helping complete the form (county agent, vo-ag teacher or farm business planning and analysis instructor), one copy is retained by the area farm management agent or state agricultural education office and the final copy retained by the Department of Agricultural Economics.

The procedure for handling farm business analysis records is as follows:

1. Input forms 7363 are received by mail from the extension sector and personally delivered by the vo-ag sector. Dr. John Starling is in charge of the Agricultural Education portion of the program.

2. The forms are recorded as received and payment is noted. The editing process can then take place (see pages 14 - 16).

3. Edited farms are taken to the stat lab for punching onto computer cards. Generally, groups of 15 to 20 farms are taken at one time. It normally takes one and one-half days to punch and verify a group of farms. (see pages 35 - 53)

4. The punched cards are then inserted between the computer program control deck appropriately and taken to the Hospital Computer Center in Starling-Loving Hall for processing. The use of a program control deck by the Ag. Econ. department removes the necessity of using a computer programmer at the center for day to day operations. Weekly communication between Ag. Econ. and the Computer Center is still extremely important to guarantee that everyone is best informed.

5. Output can be picked up at the Computer Center the day after farms are submitted for analysis. Normally Ag. Econ. personnel decolate (remove the carbon paper) the output but computer center personnel will do it if requested. At least a day and depending on their work load sometimes longer is required if computer center personnel do the decolating. The output and the punched cards are returned to the Ag. Econ. department.

6. Extra copies of specific farm analyses (educational examples or test farms) can be obtained from the computer center at a small cost. A carbon copy, not the original, should be given for duplication as it will copy better. The output should <u>NOT</u> be torn apart page by page as this causes the computer center much additional work.

7. The output is checked and coded (see pages 17 - 21)

TIMETABLE

The following timetable was used during 1974 and 1975 and can be used as a guideline for 1976 and future years.

Sept. 1 — All summaries should be published and distributed by this date. Additional copies of summaries may need to be duplicated as the inventory supply is depleted.

Sept. 15 — The "Highlights" brochure for the past year's summary data should be ordered from the OSU print shop using Mr. Jerry Grooms, Room 16, Agricultural Administration Building as the order taker.

Oct. 1 — Update the instructions for completing the 7363 form. Print copies for county and area agents and for vocational agriculture and farm business planning and analysis instructors. 500 copies should be available by November 1, with additional copies being run as needed.

Oct. 15 — Begin training any new workers who will be assisting on the program for the coming year. See pages

Nov. 1 — Update the explanation of the computer printout. 900 copies will be needed by December 30. (One copy is sent with each individual analysis).

Order covers and any other printed material such as the information and promotional brochure needed for the computer printout of individual analyses.

This is the latest possible date for allowing any further changes in the computer program. Printouts from the changed program should be checked carefully and thoroughly. A comparison of trial farms run on both old and new programs is very helpful in locating errors and in checking the changes as they relate to summaries. This is also an excellant mechanism to aid in educating new personnel as it gives them first hand on the job training.

Dec. 1 — Send area agents copies of the instructional and promotional brochure, data collection form 7363, instructions for completing the form and explanation of the output.

Dec. 15 — Send those same copies to county agents and to the vocational agriculture sector so they can distribute them to the vo-ag. teachers and farm business and planning analysis instructors.

Jan. 5 Explain operating procedures for coming year to Stat Lab. Update card format documentation and transparencies used in punching.

Make one final check to see that the computer program is functioning properly.

The first input forms for analysis begin coming in. The work load will soon increase dramatically! Make sure processing materials, envelopes for output, and other needed information is available in quantity.

Feb. 1 Order summary covers for the coming months. Quantities ordered should be based on prior years' use and adjusted for increases in numbers of farms analyzed.

Mar. 15 Have the farms analyzed to date loaded on the computer for summary operations and run a trial summary. This should be checked carefully and thoroughly. Again, this is an excellant mechanism for training the new personnel in the work required during the summary process.

Apr. 15 Load the additional farms analyzed since March 15 and begin running summaries. See page 22 of this manual for the procedure. The farms which are received for analysis after this date will not be included in summaries and will not be loaded onto computer tape until the last farm is analyzed.

Alert the duplicating department (Dr. McCormick, Marilyn Chute, and stat lab personnel) of needs required through the next few months. Describe the summary calculations the stat lab will be required to complete.

June 1 Have any requested and agreed upon computer program changes begun. This allows plenty of time for problems, complications, etc. to be handled without difficulty.

June 15 Revise the 7363 input form as needed relevant to changes made in the computer program. Order a two year's supply of 7363 input forms through Howard Frisbee of the Cooperative Extension publications office, Room 18, Agricultural Administration Building.

GENERAL

Periodical meetings of state and area farm management staff are held to discuss the farm business analysis program. The dates for these meetings vary somewhat, so obtain advance notice of all meetings and be prepared for questions and requests concerning the operation of the program.

Additionally, periodic communication with area and state farm management staff, county agents, vo-ag. teachers, and farm business and planning analysis instructions should be conducted so all involved are aware of all pertinent dates, and other information regarding the program. Public relations is extremely important and complete COMMUNICATIONS is invaluable in reaching this objective.

DUTIES REQUIRED OF OHIO FARM BUSINESS ANALYSIS PROGRAM MANAGER

The manager reports to the faculty member or members responsible for the program. Under faculty direction, he is completely responsible for the operation of the Ohio Farm Business Analysis Program.

The major duties and responsibilities are:

1. Assisting departmental faculty in educating extension and vocational agriculture staff on various aspects of the program

2. Managing and directing processing of Farm Business Data Collection Forms (7363's); this includes but is not restricted to the following:

   a. receives input forms and attached checks

   b. checks and double checks input forms for correctness and completeness of entries

   c. sees that computer cards are properly prepared from input forms

   d. provides liaison with the Public Services Computer Center which includes delivery of computer input cards and retrieval of output results

   e. checks and double checks output results

   f. provides proper distribution of results

   g. provides proper accounting and documentation throughout the processing procedure

3. Writing and publishing with faculty assistance the various publications associated with the project.

The manager interacts with department faculty, area farm management agents, county agents, vocational agriculture personnel and computer center personnel to achieve work objectives. This entails but is not restricted to the following: a) daily contacts (January through April) with the vocational agriculture instructors in charge of Ohio Farm Business Analysis for vocational agriculture, b) daily interaction with department's statistical

laboratory concerning keypunching, and c) frequent contacts with the Public Services Computer Center.

A potential manager should possess a background in and knowledge of farm management, accounting methods and procedures, and finance. An understanding of computers and computer programming is helpful but not mandatory. The individual should further be able to communicate effectively.

1975 Labor Requirements*

Ohio Computer Farm Business Analysis

Month	Period** Number	Man Hours per Period	Man Hours per Week	Man Hours per Month	Man Hours per Quarter
January	1	70	35	166	
" "	2	96	48		
February	3	116	58	244	650 WTR
" "	4	128	64		
March	5	130	65	240	
" "	6	100	50		
" "	7	120	60		
April	8	110	55	258	
" "	9	96	48		
May	10	96	48	216	668 SPR
"	11	96	48		
June	12	90	45	194	
" "	13	80	40		
July	14	70	35	140	
" "	15	70	35		
" "	16	70	35		
August	17	60	30	130	358 SU
" "	18	20	10		
September	19	40	20	88	
" "	20	36	18		
October	21	34	17	66	
" "	22	34	17		
November	23	34	17	72	188 AUT
" "	24	34	17		
December	25	34	17	50	
" "	26	0	0		
Totals		1864	932**	1864	1864
Averages		71.7	35.8	155.3	466.2

In addition to this labor, each trainee will be required 25-30 hours training prior to beginning work. If possible this should take place in October or November, prior to inflow of farm data. This training would also require at least 5 additional hours of supervision labor per trainee. Any additional items which may be added to the program at the August meeting will also need a labor allowance.

*635 farms processed in 1975 plus 17% returns and reruns
**Each period is two weeks in length

The major portion of Individual Analysis processing occurs in the 14 weeks of periods 2-8. Labor in this time span is allocated approximately as follows:

46 hours per week recording, receiving, editing 7363's, checking and coding output, shuttling information among the office, stat lab, and computer center
6 hours per week in correspondence with Area Farm Management Agents and Vo-Ag instructors, taking care of returns and reruns, and materials handling and packaging
4 hours per week in conference with Taylor, Moore, Starling
2 hours per week lecturing to farm management classes and performing special projects

58 hours per week average

Work with Individual Analyses tapers off through April and May. Summary preparation begins and picks up speed through this time span. By mid June 90% of the work load is summary related. Summary writing continues peak priority through July, with other publications and special items following. Examples of such items are a tenant-only dairy farm summary, Farm Business Management pamphlet, and comparisons involving two or more years.

Autumn Quarter work consists of preparations for next year and distribution of summaries currently in print. Preparation includes checking and positively de-bugging any program changes, ordering supplies (output covers, envelopes, summary covers, computer output binders, etc...), training additional help, revising and rewriting the "Guide to Interpretation of Output", and "Procedures and Instructions for Data Collection Forms". Autumn is also update time for all procedures used previously. Methods of recording, coding, and editing need to be examined and made more efficient if possible. Any rewriting of the procedures manual is also done at this time.

Experiences in Training Student Workers on Ohio Farm Business Analysis

The author has trained four student workers for work in this office and has assisted in the training of two student workers working for Dr. Starling in Vocational Agriculture. The experiences gained from the current student workers (Gary Groves and Steve Jolliff) will be used as a basis for the rest of this narrative. Steve and Gary are both excellent and with more training in the area of summary preparation and the assistance of this manual, either of them could manage the program.

The most important aspect of the student training is the development of an indepth understanding of the computer printout. Trainees can accomplish this by doing at least three complete farm analysis by hand and calculator instead of using the computer program. The computer program can be used as a checking device to discover errors, but the trainee learning takes place through the actual hand calculations required to obtain an analysis without the aid of the computer. ESO Paper No. 49 is a detailed explanation of the calculations and steps required to obtain each and every output item on the computer printout. With the aid of that paper the trainee is able to reproduce an individual farm analysis computer printout in its entirety. After completion of three or more hand-calculated analyses the trainee should have attained a much higher level of understanding of the computer printout and the computer program used to generate that printout.

The next step in the on-going learning and training process of a student worker is the development of a complete understanding of the input form 7363 used to collect the data. The trainee should fill out four or five input forms and use the "guidelines for checking the input form" to discover errors, omissions, etc. One input form should be outlined according to the computer

card numbers used to obtain an analysis. For example, the data on page 1, column 1, lines A-J of the input form 7363 is all put on card 020, the data on page 2, line A, columns 2 through 11 is on card 150, etc. The list of the card numbers and the data included on each card is presented on pages 37-53 of this publication. The combination of a thorough knowledge of the computer printout and a complete understanding of the input form results in the trainee being in a good position to discover errors in the printout due to input form entry errors and to understand the result in the output that certain changes or modifications of the inputs will cause.

The trainee must also learn the normal day to day operating procedures of the Ohio Farm Business Analysis Program. This includes: recording farms received from Vo. Ag. and from Extension (record sheet on page 60); keeping accurate records of payments received for the analyses; filing analyses appropriately as they progress through stages of completion; recording the analyses in the stat lab and the punching onto cards of them; the submittal of the cards at the hospital computer center; the retrieval of output and decolating (removing carbon pages) required; checking and coding output; and finally, the return of the completed analyses to the sender and the recording required when analyses leave this office.

The trainee is not generally concerned with the writing and preparation of the year-end summaries. This is generally left to the manager who delegates work among trainees in relation to need and trainee ability. The method for producing summaries is included on pages 22-26 of this publication.

Trainees should be hired fall quarter for use the following winter and spring quarters. This allows the trainee six to eight weeks of learning prior to the beginning of the analysis season. Potential student workers should have a farm background as a first requirement. Some accounting,

finance, and computer programming would be helpful but is not mandatory. They should also be able to communicate effectively and be responsible. Typically, from January through June, two student workers working twenty hours per week with the manager putting in thirty to forty hours per week will yield the amount of labor required to successfully operate the Ohio Farm Business Analysis Program.

1975 EDITING PROCESS FOR FORM 7363

1. Check "For office use only" box.

   a) Check year.
   b) See Tables 1, 2 and 3 for codes.
   c) Check that correct code is entered in these boxes.
   d) Unnumbered farms submitted through Extension will be numbered from 680-689, unnumbered farms submitted through Vo-Ag will be numbered 980-989.

TABLE 1

TYPE FARM

Dairy	1
Swine	2
Beef Feed	3
General Crop	4
Special Crop	5
Beef Breeding	6
Poultry	7
Sheep	8
General	9

TABLE 2

TYPE OF BUSINESS CODE

Type	Code
Proprietorship	1
Partnership	2
Corporation	3
Other	4

TABLE 3

OWNERSHIP CODE

	Included In State Summary	Not Included In State Summary
Full Owner	01	11
Part owner-part tenant	02	12
Tenant only	03	13
Absentee	04	14
Tenant and landlord	05	15

2. Check the Labor section.
   a) A minimum of 10 hours must be entered in this section.
   b) Number of operators is to the nearest 1/10 of an hour.

3. Check to see that year, county and farm number are entered at the top left of pages 2, 3 and 4. (Example: 74-35-100)

PAGE 2

4. Check rows E, F, I, M, P, Q, and R to be sure authorized codes are entered. If not, change the code entry to an authorized code, or transfer entries to a row in which the code is authorized.

Authorized Codes

Rows	Codes
E and F	05, 06, 09
I	12, 17, 18
M	20, 22, 47 through 50
P, Q, R	23 through 39, 47 through 50

5. a) Make sure value/unit is entered to nearest 1/100 of a dollar.
   b) Standard prices for crops with no entry in Column 2 may be found on page 14 of ESO No. 49.

6. Make sure if labor is entered in Column 3, all rows with entries have labor to nearest 1/10 of an hour, and the labor section on page 4 must be filled out if livestock was raised. Standard labor figures can be found on pages 10 and 18 of ESO No. 123.

7. Check that the sum of Column 6 and Column 7 equals the sum of Column 8, 9 and 10 for each row.

8. Check that Column 10 equals the sum of Columns 11 through 16 for each row.

9. a) Value per Acre for rotation pasture and permanent pasture must be entered if an entry is made in rows N or O.
   b) These entries must be to the nearest 1/100 of a dollar.

10. All other entries on this page are to the nearest whole number except for Column 4, rows P, Q, R and S which are to the nearest tenth.

11. The keypunch operators are now punching production for lines P, Q, R and S from column 6 rather than column 5, so if column 6 is not filled in, move the column 5 entry into column 6, also.

PAGE 4

12. All 7363's should be torn along the perforated edges at the bottom of page 1 and stapled together so the page numbers are: 1, 2, 4, 3.

13. Percent of total must be entered for each enterprise. Assume non-entries are 100 percent. Entries which are different from 100 percent should be changed to 100 percent and the labor altered to compensate for the change. (Example: 33% ownership requires increasing the individual labor by a factor of 3; 75% requires increasing by 1.33, 50% requires increasing by 2, etc.)

14. Check to see that all livestock entries on page 3 are entered on this page.

15. For a particular livestock enterprise to run, an entry must be made (other than 0) in Cash Receipts (page 1 of 7363) for that livestock type.

16. For both sheep (55) and other livestock (57) a positive value for average number of ewes (Beginning Inventory plus Ending Inventory ÷ 2) must be present for the analysis to run.

17. If an entry is made in the Labor section, check page 2 for labor entries in column 3. Standard labor figures for livestock are on page 18 of ESO No. 123.

PAGE 3

18. Check page 3 to see that all entries are legible and that enterprise codes are correct.

19. Check expenses and investment column to see if figures generally agree with page 1. (Some enterprises may have been omitted.)

20. If neither the 1 or the 0 are circled, assume it is a 1 until after the output is checked.

STEPS IN HANDLING FARM ANALYSIS OUTPUT

1. Date the computer output list of farms.

2. Count and record the number of farms on the list that are: from Extension, from Vo-Ag., from classes or as examples.

3. Divide the output into Vo-Ag., Extension, and others.

4. Date and file our copy of the total output.

5. Begin checking output and recording it on the coding sheets. All farms must be checked and recorded prior to leaving this office.

6. Staple (1) checked farms to blue covers with page 1 of the output always face up.

7. Add the form 7363 to the output.

8. Add "Guide to Interpretation" to the output.

9. Put the output with accessories into an envelope with the county and farm number on the outside of the envelope. Do not seal the envelopes, the clasp will hold it fine.

10. Take the Vo.-Ag. copies to Dr. John T. Starling.

11. Send the Extension copies to each area in large envelopes with a franking slip. Use the bird mail address forms on the outside. The Canton area does not have an area farm management agent so farms from there must be sent directly to the county agent. This is also true of certain other counties.

12. Enter the farms sent out in the blue notebook as leaving here on that date.

Guidelines for Checking and Coding Output

1. Enter the "for office use only" box of the 7363 onto the first columns of the coding sheets as shown on the "card codes" sheet. A "1" in the first box under ownership requires a zero to be entered in Col. 13 of the sheets.

2. Check to see that each enterprise analysis requested on p. 3 of the 7363 is contained in the output. Note the digit which is circled above each enterprise. When a zero is circled that enterprise should be coded 0 to be omitted from the summary. When a "1" is circled or neither of them are circled the enterprise must be checked and a final decision made by the checker.

3. Those enterprises which are summarized (codes 01-04,10,11, 21, 51-55) must be checked and coded. The remaining enterprises are <u>all</u> to be checked for errors but are always coded zero.

4. Automatic disqualifications from summary:

   A. A Return to Unpaid Operator & Family Labor, Mgnt, & Profit which is positive for the total and negative for the per hour or vice versa disqualifies the whole farm if it is on page 1, and disqualifies any enterprise which has this occurrence. The occurrence is caused by an incorrect abbreviation of hired labor to the enterprise.
   B. A disqualification of the total farm automatically rules out any of the enterprises on that farm from being in the summaries, or if col. 13 is a zero all analyzed enterprises are also to be zero.
   C. If over half the enterprises which are analyzed are bad or not to be included in the summary, the remaining enterprises should also be disqualified from the summaries.
   D. Livestock enterprises from farms which also contain a poultry analysis (code 56) cannot be summarized due to an error in the computer summary program. The 0 crop enterprises are OK, though.
   E. A very, very low (.10) or negative return per $ feed fed on page 6 of the output rules out all the livestock enterprises on that farm from the summary.
   F. A Gross Farm Income of less than $5,000 or a Total Investment of less than $10,000 disqualifies the total farm from any of the summaries.
   G. A livestock enterprise which has anything other than 100% ownership.

5. Items to check of the total farm analysis (pages 1-6 of the output) which would indicate the presence of errors due to keypunching or 7363 inaccurate entries:

   A. Overhead or Variable Costs as a Percent of Gross Income greater than 90% or negative.
   B. Percent Return on Investment greater than 100 or less than -100.
   C. Value of Labor Per: Man Hour Equivalent should range between $1.50 and $4.00, PMWU should range between $15.00 and $40.00,

Man-Year Equivalent should range between $5,000 and $12,000.

D. Page 5 of the output should be checked for: 1) any gaps in the third or fourth column, when those columns are present. Gaps for any item other than "other land" would indicate that the individual labor per item was not filled in on the 7363. 2) each crop on page 2 of the 7363 and each livestock item on page 4 of the 7363 should show up on this page of the output. The lack of an item here indicates problems. The problem could be one of three things:
   1) a card may be misnumbered (corn is always on card 150, etc.)
   2) a crop code may be incorrect (lines E & F can only have codes 05, 06, 09, etc.) or
   3) a 7363 may not have the same identification numbers on each page. e.g. pages 1, 2, and 3 might be 74-88-843 but if page 4 is not also 74-88-843 all the livestock data will not process. The most common number problems are incorrect year (75-88-843), or nonexistant county: (74-89-843), or transposing farm numbers (74-88-834) instead of 843.

E. Check each crop and acres at top of page 6. Each crop with production on page 2 of the 7363 should be listed here and the acreage figures should be identical. Differences here would also be caused by one of the three reasons listed in 5-D above.

F. Percent of Gen. Crops and/or Percent total Tillable acres in corn add soybeans greater than 100 implies a problem.

G. Fertilizer and lime cost per acre greater than $50.

H. Machinery Investment per crop acre greater than $100.

I. Machinery Cost Per Crop acre greater than Machinery Investment Per Crop acre.

The presence of any of the preceeding occurrences would either be cause for a rerun of the farm or at a minimum the exclusion of that farm from the state summaries.

6. If the total farm is all right for inclusion in the state summary each of the enterprises which are summarized (codes 01-04, 10, 11, 21, 51-55) must be checked for a decision as to inclusion or exclusion from their respective summaries. Any other enterprises analyzed must also be checked as to whether a rerun is necessary, even if the total farm is not to be included in a summary.

7. Reasons and causes for a crop enterprise rerun:

   A. No per acre figures, caused by too few expenses relative to the number of acres (per acre cost of less than 1¢ will not print).

   B. Huge figures relative to the rest of the enterprise analysis, usually caused by the entry on page 3 of the 7363 of cents behind a dollar figure and this escaping correction during the 7363 edit process.

   C. Feeder livestock purchases in crop entepprises cash expense is as automatic rerun after the correction has been made on the 7363. This is also true for livestock depreciates included in a crop enterprise analysis.

8. Reasons a corn (01), soybean (02), oats (03), wheat (04), alfalfa hay (10), clover-mixed hay (11), or corn silage (21) enterprise analysis should not be included in the state survey:

   A. Less than 7 acres of the particular crop.
   B. No Total Investment for a crop.
   C. Percen t Return on Investment greater than 80% or less than -80%.
   D. Total Return to Unpaid Operator and Family Labor, Mgmt. and Profit positive and per Hour negative or vice versa.

9. Reasons and causes for a dairy/milk enterprise rerun:

   A. Average number of cows different from that entered on page 4 of the 7363; caused by a mispunch by the keypunchers.
   B. Huge figures relative to the rest of the dairy analysis, same cause as in 7-B above.

10. Reasons a dairy/milk enterprise should not be included in the state summary:

   A. Less than 10 cows.
   B. Return per dollar feed fed of less than 30¢.
   C. No Total Investment.
   D. Percent Return on Investment greater than 80 or less than -80.
   E. Total Return to Unpaid Labor, Mgnt and Profit positive and per Hour negative or vice versa.
   F. Pounds of 3.5 Milk sold per cow less than 5,000 or greater than 20,000.
   G. Milk sales as a percent of Dairy Value less than 50% or greater than 150%.
   H. Value of Milk sold per cwt less than $5.00 or greater than $11.00.
   I. Something other than dairy analyzed under code 51.

11. Reasons and causes for a swine enterprise rerun:

   A. To obtain a swine analysis there must be either a positive number for average number of sows and gilts or a value for cash receipts from swine on page 1, line P of the 7363. When neither exist, 1 sow at 200 pounds worth $50 is added to beginning and ending inventory on the 7363.
   B. Market Hogs sold are sometimes entered under feeder pigs sold on the 7363. This results in a 200 pound weight/feeder pig sold and must be rerun.
   C. Huge figures (see 7-B above.)

12. Reasons a swine enterprise should not be included in the state survey:

   A. Less than 10 sows and gilts for a farrow and finish swine enterprise or a feeder pig swine enterprise.
   B. Less than 20 market hogs sold for a finishing only swine enterprise.
   C. Return per dollar feed fed of less than 30¢.

D. No Total Investment
E. Percent Return on Investment greater than 80% or less than -80%.
F. Total Return to Unpaid Labor, Mgnt, and Profit positive and per Hour negative or vice versa.
G. Something other than swine analyzed under dode 52.

13. Reasons and causes for a beef feeding enterprise rerun:
A. Huge fugures (see 7-B).

14. Reasons a beef feeding enterprise should not be included in the state summary:

A. Less than 10 fed cattle sold.
B. A negative pounds of beef produced.
C. Return per dollar feed fed less than 30¢.
D. No Total Investment.
E. Percent Return on Investment greater than 80% or less than -80%.
F. Total Return to Unpaid Labor and Mgnt. and Profit positive and per Hour negative or vice versa.
G. Something other than beef cattle analyzed under code 53.

15. Reasons and causes for a beef breeding enterprise rerun:

A. Huge fugures (see 7-B).

16. Reasons a beef feeding enterprise should not be included in the state summary:

A. Less than 10 cows bred to calve.
B. Percent Calf Crop greater than 200 or negative.
C. A negative pounds of beef produced.
D. Return per dollar feed fed less than 30¢.
E. No Total Investment.
F. Percent Return on Investment greater than 80 or less than -80.
G. Total Return to Unpaid Labor, Mgmt. and Profit positive and per Hour negative or vice versa.
H. Something other than beef breeding analyzed under code 54.

17. The Poultry enterprise analysis is very poor and seldom used. It can not be summarized because it contains more than one type of poultry. The existence of a poultry analysis also causes any other livestock enterprise on that farm to be excluded from the state summary because the summary program blows up when it is computing if a poultry analysis is present. Any poultry analysis should be hand checked carefully.

18 The Sheep and Other Livestock enterprise are not summarized either. The only reason sheep is not summarized is because we have never received enough analyses to get a meaningful summary. Obviously, other livestock cannot be summarized because it can be anything. To get a sheep analysis positive average number of ewes must be present so for those few farms which desire a feeder lamb analysis, 1 ewe at 100 lbs. wor th $50 is added to both beginning and ending inventories on the 7363.

STEPS IN PREPARATION OF STATE SUMMARIES

1. The following summaries are normally obtained for publication:

   A. Owner-operator and tenant-landlord dairy farms

   B. The same farms included in A summarized by enterprise to get a dairy and milk enterprise summary

   C. The same farms included in A summarized by herd sizes (number of cows) to get a Dairy By Herd Size summary. (Sizes: $\geq$80, 40-79, $\leq$39)

   D. Owner-operator and tenant-landlord General Crop Farms

   E. Tenant only General Crop Farms

   F. Corn enterprises (O/O and T/L farms)

   G. Soybean enterprises " "

   H. Wheat enterprises " "

   I. Oats enterprises " "

   J. Corn Silage enterprises "

   K. Alfalfa Hay enterprises "

   L. Clover Mixed Hay enterprises "

   M. O/O and T/L Swine Farms

   N. Farrow and Finish Swine enterprises (100% ownership)

   O. Finishing Swine enterprises (100% ownership)

   P. Feeder Pig Swine enterprises (100% ownership)

   Q. O/O and T/L Beef Farms

   R. Beef Feeding enterprises (100% ownership)

   S. Beef Breeding enterprises (100% ownership)

2. The first step in the summary process is to load the computer cards of each of the farms analyzed during the year onto computer tape. The computer programmer (Ron Childers currently) at the Public Service Computer Center handles the loading of the cards. The cards have been stored in this office this year for the first time and it has worked well. The cards are taken by car from here to the hospital and loaded. Do not destroy the cards until the summaries are completed and the data has been put onto tape with two copies of the tape being made. One copy of the tape is kept by the computer center and one copy is retained by this office. Normally the computer center

retains possession of the cards until we give the order to recycle them.

A second or third, etc. group of farms can be loaded onto the tape after the first load if need be. The need for this would arise due to a large number of farm analyses received after the first load took place. At this point, a word of caution is needed. If any of the farms which were loaded the first time had to be rerun after loading they would then be loaded again in any successive loads. This will cause extreme problems and must be avoided. The same problem will arise if different farms with the same area, county and farm number were submitted and analyzed during the season. This emphasizes the need for accurate record keeping by this office.

The computer programmer has a small sort program which will delete any farms requested from the loaded tape. The procedure for rerunning a farm which has previously been loaded onto the summary tape is as follows: 1) Have the programmer remove the farm from the summary tape, 2) have the corrections punched and the corrected deck of cards for that farm resubmitted and a new analysis obtained, 3) throw away the office copy of the old analysis, 4) destroy the single summary card for the old analysis and make a new one for the rerun, 5) store the office copy of the output of the new analysis, and 6) load the rerun farm with any other during the next load.

3. When the summary tape is complete and correct the summary process can begin. This means all analyzed farms to date have been loaded; no farm is loaded twice; reruns are taken care of; and finally, the list of farms loaded in terms of total number on the tape is exactly equal to the number of single summary cards in this office. The single summary cards were obtained during the checking of the output of each individual farm over the course of the season. The 1973 and 1974 code sheets are within this publication on pages 27 and 61. The 1974 procedure for decision making concerning the inclusion or exclusion from summaries of each farm and every enterprise within all farms is on pages 18-24 of this publication. That procedure is used to

4. The deck of single summary cards is the basis for obtaining all summaries. The deck is sorted in relation to the relevant summary. For example, the procedure for obtaining the owner-operator and tenant-landlord Dairy Summary (1.-A above) for 1974 using the single summary card deck would be as follows: 1) Sort the deck on column 13 to determine which farms can be used for summary purposes. All farms with a "1" in column 13 can be included, all with a "0" there cannot. The deck with zeros in column 13 is then put aside and not to be used for any summary. 2) The deck with ones in column 13 is next sorted on column 9 to obtain ownership classifications. All cards with a "1" for full owner or a "5" for tenant and landlord in columb 9 are saved and the other ownership classifications are put aside for future use. 3) The deck at hand now contains all full owner and tenant landlord farms which have good data for inclusion in the state summary. The next sort is on column 8 to determine the farms which were classified as Dairy farms according to farm type. The farms which have a "1" in column 8 are saved while the other farm types are put aside with the other ownership classifications. 4) The final sort is made on column 51 to obtain those farms which have good dairy and milk enterprise data. Farms which have a "1" in column 51 are saved while those with a "0" in this column are added to the other deck for future use. 5) The deck at hand now contains all Dairy farms by type (step 3) which are either full owner or tenant-landlord (step 2) and contain good total farm data (step 1) and good dairy enterprise data (step 4). The final procedure is to sort this deck of cards dequentially by area, county and farm number. This is accomplished by using column 1 through 7 of the cards. The sequentially sorted cards are then given to the computer programmer at the Public Service Hospital Computer Center who will obtain the summary. Other summaries are obtained in a similar manner.

5. The computer programmer has two computer programs available to use to compute summaries. The first one divides the given farms into groups composed of upper 10%, upper 25%, middle 50% and lower 25%. The ranking is done by return per hour to unpaid operator and family labor, management and profit for the total farm for farm summaries and by the same figure for the appropriate enterprise for the enterprise summaries. The second program also ranks the farms or enterprises by the same return per hour figure but it rolls all the observations into the lower 25% group so that an average is obtained. The second program is used when only an average is desired or when there are not enough observations to allow for a meaningful summary by groups. There should be at least 10 observations per group in all summaries. The upper 10% group is used infrequently due to this restriction. The upper 25%, middle 50% and lower 25% summary program is used when there are at least 40 observations. The second program is used when there are less than 40 observations. In addition to the average, upper 50% and lower 50% groups can also be ontained via the second program. This is accomplished by obtaining the average and then dividing the observations by hand into the upper half (the half with higher returns per hour) and the lower half. These groups are then run through the average summary program one at a time to ultimately obtain the following three groups: upper 50%, average and lower 50%. When there are less than 20 observations only an average is obtained. Generally, a summary without at least 10 observations is not published. The turnaround time for obtaining summaries has historically been less than two days and there are no expectations of this changing.

6. The statistics laboratory of the Department of Agricultural Economics and Rural Sociology (stat lab) is essential in the next step of the summary process. The summary obtained from the computer programmer is checked and corrections are made on it. Corrections required are listed and explained in a separate publication which is in preparation at this time. The corrected

is then taken to the stat lab where per hundredweight figures are calculated for livestock enterprise summaries and per acre figures are calculated for crop enterprise summaries. The stat lab figures are then double checked and the corrected copy is given to the secretary for typing in the format decided upon for the particular summary. The typed copy is duplicated and that copy is then checked again, both for missed mathematical errors and for possible typing errors. The tables, graphs and charts are next decided upon, taken to the stat lab for completion and double ckecked. The final step is to write the remaining portion of the summary. Eventually a total preliminary summary is completed and submitted for comments, editing, etc. to Dr. Reed Taylor, Dr. John Moore and the area extension agents who are assigned that particular summary for comments, etc. The revision and corrections are incorporated into the final version which is checked one final time and then given to the stat lab for duplication. Copies are sent to the people on the list on page 64 of this publication.

1974
CARD CODES FOR SUMMARIES

Col. No.	Data		
1-2	AREA CODE	01-10	
3-4	COUNTY NO.	01-88	
5-7	FARM NO.	001-999	
8	FARM TYPE	1-9	
9	OWNERSHIP CODE	1-5	
10	TYPE OF BUSINESS	1-4	
11-12	YEARS COOPERATION	01-40	
13	1,0: INCLUDE, NOT INCLUDE	TOTAL FARM	
14		CORN	(01)
15		SOYBEANS	(02)
16		OATS	(03)
17		WHEAT	(04)
18		ALFALFA HAY	(10)
19		CLOVER-MIXED HAY	(11)
20		CORN SILAGE	(21)
21	0: IF ENTERPRISE WAS ANALYZED,	ALL CROPS	(00)
22		OTHER SILAGE, OTHER HAY, OTHER GRAIN	
23		SEED CORN	
24		SEED SOYBEANS	
25		SEED WHEAT	
26		CABBAGE	
27		POTATOES	
28		GRAPES	
29		SWEET CORN	
30		TOBACCO	
31		SUGAR BEETS	
32		TOMATOES	
33		PICKLES	
34		POPCORN	
35		APPLES	
36		PEACHES	
37		STRAWBERRIES	
38		OTHER FRUIT	
39		OTHER VEGETABLE	
40		ROTATION PASTURE	
41		BARLEY, code 05	
42		PERMANENT PASTURE	
43		GRAIN SORGHUM, code 06	
44		DIVERTED ACRES	
45		OTHER SPECIAL CROP	
46		OTHER GENERAL CROP	
47		DEHYDRATED ALFALFA, code 12	
48		GREEN CHOP, code 17	
49		HAYLAGE, code 19	
50		DIRECT CUT GRASS SILAGE, code 20	

51	1,0: INCLUDE, NOT INCLUDE	DAIRY
52		SWINE
53		BEEF FEEDING
54		BEEF BREEDING
55		SHEEP
56	0: IF ENTERPRISE WAS ANALYZED:	POULTRY
57	" " " "	OTHER LIVESTOCK

62 IF SWINE; 2 = FARROW & FINISH, 3 = FINISHING ONLY, 4 = FEEDER PIG

71-72 YEAR: "74"

78-80 CARD NUMBERS, 1 - 700

ENTERPRISES ANALYZED IN 1975

Code	Enterprise	Number of Farms with Enterprise	Enterprises Included in State Summaries
00	All Crops	472	0
01	Corn	317	97
02	Soybeans	249	47
03	Oats	157	39
04	Wheat	259	71
05	Barley	5	0
06	Grain Sorghum	3	0
09,18,22	Other: Grain, Hay, Silage	37	0
10	Alfalfa Hay	65	23
11	Clover, Mixed Hay	106	26
12	Dehydrated Alfalfa	9	0
17	Green Chop	3	0
19	Haylage	42	0
20	Direct Cut Grass Silage	2	0
21	Corn Silage	118	37
23	Seed Corn	1	0
24	Seed Soybeans	1	0
25	Seed Wheat	1	0
26	Cabbage	0	0
27	Potatoes	2	0
28	Grapes	0	0
29	Sweet Corn	1	0
30	Tobacco	25	0
31	Sugar Beets	9	0
32	Tomatoes	10	0
33	Pickles	7	0
34	Popcorn	5	0
35	Apples	2	0
36	Peaches	1	0
37	Strawberries	2	0
38	Other Fruit	1	0
39	Other Vegetable	3	0
40	Rotation Pasture	24	0
42	Permanent Pasture	38	0
44	Diverted Acres	0	0
45,47-50	Other Special Crops	4	0
46	Other General Crop	3	0
51	Dairy	290	160
52	Swine	192	80
53	Beef Feeding	182	44
54	Beef Breeding	102	26
55	Sheep	46	0
56	Poultry	17	0
57	Other Livestock	19	0

ANALYSIS OF FARM NUMBERS IN 1975

Number of Farms by Type of Business

1	Sole Proprietor	502
2	Partnership	116
3	Corporation	17
4	Other	2
		637

Number of Farms Received Per Area (Includes Extension and Vo. Ag.)

1	Defiance	53
2	Fremont	75
3	Wapakoneta	58
4	Mt. Gilead	71
5	Eaton	67
6	Washington Court House	40
7	Wooster	176
8	Canfield	26
9	McConnelsville	41
10	Jackson	30
		637

Number of Farms by Farm Type

1	Dairy	275
2	Swine	62
3	Beef Feeding	33
4	General Crop	186
5	Special Crop	8
6	Beef Breeding	14
7	Poultry	4
8	Sheep	2
9	General	53
		637

Number of Farms by Ownership

1	Full Owner	396
2	Part Owner, Part Tenant	137
3	Tenant Only	86
4	Absentee Owner	6
5	Tenant and Landlord	12
		637

1974 FARM BUSINESS ANALYSIS SUMMARIES

(632 forms were available for summarization)

Number In Summary	Type of Summary
	DAIRY — 1900 Copies Printed of each
160	1. Owner-Operator and Tenant Landlord (O/O & T/L) Dairy by Return per Hour to the Farm, including Dairy and Milk Enterprises.
38	2. O/O and T/L Dairy (Herd Size 80 cows) by Return per Hour to the Farm.
90	3. O/O and T/L Dairy (Herd Size 40-79 cows) by Return per Hour to the Farm.
32	4. O/O and T/L Dairy (Herd Size 39 cows) by Return per Hour to the Farm.
	GENERAL CROPS — 1900 Copies Printed
47	5. Owner-Operator General Crop Farms by Return per Hour to the Farm.
36	6. Tenant Only General Crop Farms by Return per Hour to the Farm.
97	7. O/O and T/L farms by Return per Hour to the Corn Enterprise.
47	8. O/O and T/L farms by Return per Hour to the Soybean Enterprise.
71	9. O/O and T/L farms by Return per Hour to the Wheat Enterprise.
39	10. O/O and T/L farms by Return per Hour to the Oats Enterprise.
37	11. O/O and T/L farms by Return per Hour to the Corn Silage Enterprise.
23	12. O/O and T/L farms by Return per Hour to the Alfalfa Hay Enterprise.
26	13. O/O and T/L farms by Return per Hour to the Clover, Mixed-Hay Enterprise.
	SWINE — 1650 Copies Printed
19	14. Owner-Operator and Tenant-Landlord Swine farms by Return per Hour to the Farm.
43	15. Farms with 100% ownership in Swine by Return per Hour to the Farrow and Finish Swine Enterprise.
28	16. Farms with 100% ownership in Swine by Return per Hour to the Finishing Swine Enterprise.
9	17. Farms with 100% ownership in Swine by Return per Hour to the Feeder Pig Swine Enterprise.
	BEEF — 1400 Copies Printed
8	18. Owner-Operator and Tenant-Landlord Beef farms by Return per Hour to the Farm.
44	19. Farms with 100% ownership in Beef by Return per Hour to the Beef Feeding Enterprise.
26	20. Farms with 100% ownership in Beef by Return per Hour to the Beef Breeding Enterprise.

Farm Business Analysis Summary
1972 - 1975

Farms received from:	1972	%	1973	%	1974	%	1975*	%
Vocational Agriculture	142	31	244	48	357	61	396	68
Extension	320	69	264	52	228	39	189	32
Total	462		508		585		585*	

* as of 4/4/75

	1974			1975*		
Received by Area:	Vo Ag	Ext	Total	Vo Ag	Ext	Total
1) Defiance	18	25	43	28	21	49
2) Fremont	58	17	75	69	16	85
3) Wapakoneta	32	12	44	38	14	52
4) Mt. Gilead	24	43	67	28	37	65
5) Eaton	40	20	60	44	5	49
6) Washington Court House	9	32	41	1	35	36
7) Wooster	129	50	179	130	33	163
8) Canfield	21	5	26	23	2	25
9) Belle Valley	18	6	24	28	9	37
10) Jackson	8	18	26	7	17	24
	357	228	585	396	189	585
Returns[1]/	51	31	82	38	33	71
As a % of Individual totals	14.3%	13.6%	14.0%	9.6%	17.5%	12.1%
Reruns[2]/	30	29	59	25	8	33
As a % of Individual totals	8.4%	12.7%	10.1%	6.3%	4.2%	5.6%

1/ Farms received and checked into the system which must be returned to the sender due to errors on the input form.

2/ Farms which have been through the computer and analyzed at which point an error is discovered which requires the farm to be rerun. This includes farms which may have been rerun more than once, but does not include farms which had an error that caused the whole computer run to fail.

CARD FORMAT FOR OHIO FARM BUSINESS ANALYSIS DATA - 4 CARDS PER FARM

Column Nos.	Field Name	Variable Code Name
CARD 1		
1	Card Number	
2	Last Digit of Year	
3-4	Area	
5-6	County	
7-9	Farm	
10	Farm Type	
11	Ownership Classification	
12-19	Cash Receipts	CASHREC
20-26	Capital Gains and Losses	CAPGAN
27-33	Inventory Changes	INVCHG
34-40	Feeder Livestock Purchases	FDLSP
41-48	Gross Farm Income	GRSFIN
49-55	Cash Expenses	CSHEXP
56-61	Depreciation	DEPR
62-67	Interest Not Charged	INCH
68-74	Management Income & Profit	MGTIP
75-80	Unpaid Operator & Family Labor	UOFL
CARD 2		
1-11	Same as Card 1	
12-17	Variable Costs	VAREXP
18-23	Overhead Costs	OHEXP
24-30	Net Cash Income	NCSHI
31-37	Net Farm Income	NFRMI
38-45	Total Investment	TOTIV
46-51	Return to Investment	ROIV
52-58	Return to Unpd. Operator & Family Labor, Mgt., & Profit	RUOMP
59-64	Return to Unpd. Operator & Family Labor, Mgt., & Profit Per Hour	RUOMPH
65-70	No. Man Equivalent Hours Used	NMEHU
71-75	Value of Hired Labor Used	VHLU
76-80	General Crop Acres	GCRPA
CARD 3		
1-11	Same as Card 1	
12-15	Total Harvested Crop Acres	THCA
16-22	Value of General Crops	VGCRP
23-29	Value of All Crops	VACRP

Column Nos.	Field Name	Variable Code Name
30-36	Value of Net Livestock Increase	VNLI
37-43	Total Value of Feed Fed to All Livestock Enterprises	TVFALE
44-45	Enterprise Analysis 1	EAU
46-47	Enterprise Analysis 2	EAD
48-49	Enterprise Analysis 3	EAT
50-51	Enterprise Analysis 4	EAQ
52-54	Acres of Corn	CRNA
55-57	Acres of Soybeans	SOYA
58-60	Acres of Haylage	HAYA
61-63	Number of Cows	NOCOW
64-70	Value of Milk Sold	VMLKS
71-77	Pounds of 3.5 Milk Sold	LBMLKS
78-80	Number of Litters Farrowed	NOLF

CARD 4

1-11	Same as Card 1	
12-18	Pounds of Pork Produced	LBPRKP
19-22	Number of Fed Cattle Sold	NOFCS
23-29	Pounds of Beef Produced (figure obtained from beef feeding enterprise only)	LBBFP
30-34	Number of Cows Bred to Calve	NOCBC
46-51	Average Number of Hens	ANOH

FARM BUSINESS ANALYSIS CARD LAYOUTS
PUBLIC SERVICE COMPUTER CENTER

Card Code	Positions	Data Description or Value	
010	1-3	'010'	
	*4-5	Data Year	
	*6-7	County Number	
	*8-10	Farm Number	
	11-12	Farm Type	
	13-14	Ownership Code	
	15-16	Type of Business Code	
020	1-3	'020'	
	11-17	Milk and Cream (Net)	
	18-24	Poultry and Eggs	
	25-31	General Crops	
	32-38	Special Crops	
	39-45	Cash Rent and Royalties	
	46-52	Labor off Farm	
	53-59	Custom Work	
	60-66	Wool & Wool Subsides	
	67-73	Other Livestock Products	
	74-80	Tax Refund	
030	1-3	'030'	
	11-17	Patronage Dividend	
	18-24	Breeding Fees Received	
	25-31	Miscellaneous Receipts	
	32-38	Government Crop Payments	
	39-45	Government Payments	
	46-52	Swine	
	53-59	Fat Cattle & Calves	Market Livestock
	60-66	Veal Calves	Both Raised and Purchased
	67-73	Lambs	Purchased
040	1-3	'040'	
	11-17	Hired Labor	
	18-24	Feed Purchased	
	25-31	Farm Supplies	
	32-38	Machinery Repairs	
	39-45	Building, Fence, etc., Repairs	
	46-52	Fuel, Oil, Grease (Farm Share)	
	53-59	Utilities (Farm Share)	
	60-66	Drying and Storage	
	67-73	Miscellaneous Expenses	
	74-80	Seeds and Plants	

*These card columns represent constant data and are repeated in every unique card.

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
050	1-3	'050'
	11-17	Fertilizer and Lime
	18-24	Machine Hire and Trucking
	25-31	Auto Expense (Farm Share)
	32-38	Interest on Notes and Mortgage (Farm Share)
	39-45	Veterinary and Medicine
	46-52	Breeding Fees, Registration & Milk Testing
	53-59	Feeder Livestock Purchase
	60-66	Taxes (Farm Share)
	67-73	Rent (Cash)
	74-80	Insurance (Farm Share)
060	1-3	'060' Beginning Inventories
	11-17	Purchased Breeding Livestock
	18-24	Raised Breeding Livestock
	25-31	Market Livestock
	32-38	Grain, Hay Supplement
	39-45	Supplies and Fertilizer
	46-52	Machinery, Equipment
	53-59	Buildings, Fence, Tile, etc
	60-66	Land (Current Ag. Value)
070	1-3	'070' Closing Inventories
	11-17	Purchased Breeding Livestock
	18-24	Raised Breeding Livestock
	25-31	Market Livestock
	32-38	Grain, Hay Supplement
	39-45	Supplies and Fertilizer
	46-52	Machinery, Equipment
	53-59	Buildings, Fence, Tile, etc.
	60-66	Land (Current Ag. Value)
080	1-3	'080' Capital Gains & Depreciation
	11-17	Raised Breeding Livestock
	18-24	Purchased Breeding Livestock (Gain)
	25-31	Machinery, Equipment (Gain)
	32-38	Purchased Breeding Livestock (Loss)
	39-45	Machinery, Equipment (Loss)
	46-52	Building, Fence, Tile, etc. (Depreciation)
	53-59	Machinery, Equipment (Depreciation)
	60-66	Purchased Breeding Livestock (Depreciation)

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
090	1-3	'090' Labor
		Operator's Labor Used
	11-17	Number of Operators
	18-24	Hours
	25-31	Value per hour
	32-38	Numer of Operators
	39-45	Hours
	46-52	Value per hour
		Unpaid Family Labor Used
	53-59	Hours (Wife)
	60-66	Value per hour (Wife)
	67-73	Hours (Family Labor Over 14)
	74-80	Value per hour (Family Labor Over 14)
100*	1-3	'100' Labor
		Unpaid Family Labor Used
	11-17	Hours (Family Labor Under 14)
	18-24	Value per hour (Family Labor Under 14)
		Hired Labor
	25-31	Hours
150	1-3	'150' 'Crop Production - Corn (bushel)'
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
160	1-3	'160' 'Crops Fed to Livestock - Corn'
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
170	1-3	'170' 'Crop Production - Soy beans (bushel)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock

*No cards 110, 120, 130, or 140.

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
180	1-3	'180' 'Crops Fed to Livestock - Soybeans (bushel)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
190	1-3	'190' 'Crop Production - Oats (Bushel)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
200	1-3	'200' Crops Fed to Livestock - Oats (Bushels)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
210	1-3	'210' Crop Production - Wheat (Bushels)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
220	1-3	'220' Crops Fed to Livestock - Wheat (Bushel)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
230	1-3	'230' Crop Production - "Other Grain" (Bushel)
	11-17	Grain Type Code
	18-24	Value/Unit
	25-31	Labor/Acre (hours)
	32-38	Total Acres
	39-45	Total Production
	46-52	Share of Production
	53-59	Beginning Inventory
	60-66	Sales
	67-73	Closing Inventory
	74-80	Fed on Farm
240	1-3	'240' Crops Fed to Livestock - "Other Grain" (Bushel)
	11-17	Dairy
	18-24	Hogs
	25-31	Feeder Cattle
	32-38	Beef Cows
	39-45	Sheep
	46-52	Poultry
250	1-3	'250' Crop Production - "Other Grain" (Bushel)
	11-17	Grain Type Code
	18-24	Value/Unit
	25-31	Labor/Acre (hours)
	32-38	Total Acres
	39-45	Total Production
	46-52	Share of Production
	53-59	Beginning Inventory
	60-66	Sales
	67-73	Closing Inventory
	74-80	Fed on Farm
260	1-3	'260' Crops Fed to Livestock - "Other Grain" (Bushel)
	11-17	Dairy
	18-24	Hogs
	25-31	Feeder Cattle
	32-38	Beef Cows
	39-45	Sheep
	46-52	Poultry
270	1-3	'270' Crop Production - Alfalfa Hay (Ton)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
280	1-3	'280' Crops Fed to Livestock - Alfalfa Hay (tons)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
290	1-3	'290' Crop Production - Clover, Mixed Hay (tons)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
300	1-3	'300' Crops Fed to Livestock - Clover, Mixed Hay - (tons)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
310	1-3	'310' Crop Production "Other Hay" (tons)
	11-17	Crop Code
	18-24	Value/Unit
	25-31	Labor/Acre (hours)
	32-38	Total Acres
	39-45	Total Production
	46-52	Share of Production
	53-59	Beginning Inventory
	60-66	Sales
	67-73	Closing Inventory
	74-80	Fed on Farm

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
320	1-3	'320' Crops Fed to Livestock - "Other Hay" (tons)
	11-17	Dairy
	18-24	Hogs
	25-31	Feeder Cattle
	32-38	Beef Cows
	39-45	Sheep
	46-52	Poultry
330	1-3	'330' Crop Production - "Other General Crop" (tons)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
340	1-3	'340' Crops Fed to Livestock "Other General Crop" (tons)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
350	1-3	'350' Crop Production - Corn Silage (tons)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
360	1-3	'360' Crops Fed to Livestock - Corn Silage (tons)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
370	1-3	'370' Crop Production - "Haylage" (tons)
	11-17	Value/Unit
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Total Production
	39-45	Share of Production
	46-52	Beginning Inventory
	53-59	Sales
	60-66	Closing Inventory
	67-73	Fed on Farm
	74-80	Dairy - Fed to Livestock
380	1-3	'380' Crops Fed to Livestock - Haylage (tons)
	11-17	Hogs
	18-24	Feeder Cattle
	25-31	Beef Cows
	32-38	Sheep
	39-45	Poultry
390	1-3	'390' Crop Production - "Other General Crop" (tons)
	11-17	Crop Code
	18-24	Value/Unit
	25-31	Labor/Acre (hours)
	32-38	Total Acres
	39-45	Total Production
	46-52	Share of Production
	53-59	Beginning Inventory
	60-66	Sales
	67-73	Closing Inventory
	74-80	Fed on Farm
400	1-3	'400' Crops Fed to Livestock - "Other General Crop" (tons)
	11-17	Dairy
	18-24	Hogs
	25-31	Feeder Cattle
	32-38	Beef Cows
	39-45	Sheep
	46-52	Poultry

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
410	1-3	'410' Rotation Pasture
		Crop Production
	11-17	Labor/Acre (hours)
	18-24	Total Acres
	25-31	Rotation Pasture used (Value per acre in $)
	32-38	Fed on Farm
		Crops Fed to Livestock
	39-45	Dairy
	46-52	Hogs
	53-59	Feeder Cattle
	60-66	Beef Cows
	67-73	Sheep
	74-80	Poultry
420	1-3	'420' Permanent Pasture
		Crop Production
	11-17	Labor/Acre (hours)
	18-24	Total Acres
	25-31	Permanent Pasture Used (Value/Acre - $)
	32-38	Fed on Farm
		Crops Fed to Livestock
	39-45	Dairy
	46-52	Hogs
	53-59	Feeder Cattle
	60-66	Beef Cows
	67-73	Sheep
	74-80	Poultry
430	1-3	'430' Crop Production - Special Crop
		Special Crop (line P)
	11-17	Code
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Share of Production ($)
		Special Crop (line Q)
	39-45	Code
	46-52	Labor/Acre (hours)
	53-59	Total Acres
	60-66	Share of Production ($)
440	1-3	'440' Crop Production - "Special Crop"
		Special Crop (line R)
	11-17	Code
	18-24	Labor/Acre (hours)
	25-31	Total Acres
	32-38	Share of Production ($)
		Other Special Crop
	39-45	Labor/Acre (hours)
	46-52	Total Acres
	53-59	Share of Production ($)
		Diverted Acres
	60-66	Labor/Acre (hours)
	67-73	Total Acres

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
450	1-3	'450'
		Total Acres In
	11-17	Woodland
	18-24	Other Land
	25-31	Total Acreage
	32-38	Crop Acres Owned
	39-45	Crop Acres Rented
460	1-3	'460' Actual Pounds of Purchased Supplement Fed
	11-17	Total Fed on Farm
	18-24	Dairy
	25-31	Hogs
	32-38	Feeder Cattle
	39-45	Beef Cows
	46-52	Sheep
	53-59	Poultry
470	1-3	'470' Actual Dollars of Purchased Supplement Fed
	11-17	Total Fed on Farm
	18-24	Dairy
	25-31	Hogs
	32-38	Feeder Cattle
	39-45	Beef Cows
	46-52	Sheep
	53-59	Poultry
480	1-3	'480' Actual Pounds of Purchased Grain Fed
	11-17	Total Fed on Farm
	18-24	Dairy
	25-31	Hogs
	32-38	Feeder Cattle
	39-45	Beef Cows
	46-52	Sheep
	53-59	Poultry
490	1-3	'490' Actual Dollars of Purchased Grain Fed
	11-17	Total Fed on Farm
	18-24	Dairy
	25-31	Hogs
	32-38	Feeder Cattle
	39-45	Beef Cows
	46-52	Sheep
	53-59	Poultry

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
500	1-3	'500' Actual Pounds of All Purchased Roughages Fed
	11-17	Total Fed on Farm
	18-24	Dairy
	25-31	Hogs
	32-38	Feeder Cattle
	39-45	Beef Cows
	46-52	Sheep
	53-59	Poultry
510	1-3	'510' Actual Dollars of All Purchased Roughages Fed
	11-17	Total Fed on Farm
	18-24	Dairy
	25-31	Hogs
	32-38	Feeder Cattle
	39-45	Beef Cows
	46-52	Sheep
	53-59	Poultry
520	1-3	'520' Swine - Begin Inventory
		Sows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Gilts
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
530	1-3	'530' Swine - Begin Inventory
		Boars
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Shoats and/or Feeder Pigs
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
540	1-3	'540' Swine - Purchases
		Sows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Boars
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Feeder Pigs
	53-59	Number
	60-66	Total Weight

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
	67-73	Total Value
550	1-3	'550 Swine - Sales
		Sows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Boars
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
560	1-3	'560' Swine - Sales
		Market Hogs
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Feeder Pigs
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
570	1-3	'570' Swine - Ending Inventory
		Sows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Gilts
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Boars
	53-59	Number
	60-66	Total Weight
	67-73	Total Value
580	1-3	'580' Swine - Ending Inventory
		Shoats and/or Feeder Pigs
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Litter Information
	32-38	Number of Litters farrowed
	39-45	Number of Pigs Weaned

FARM BUSINESS ANALYSTS CARD LAYOUTS

Card Code	Positions	Data Description or Value
590	1-3	'590' Dairy - Beginning Inventory
		Cows
	11-17	Number
	18-24	Total Value
		Bulls
	25-31	Number
	32-38	Total Value
		Heifers
	39-45	Number
	46-52	Total Value
		Calves
	53-59	Number
	60-66	Total Value
600	1-3	'600' Dairy - Purchases
		Cows
	11-17	Number
	18-24	Total Value
		Bulls
	25-31	Number
	32-38	Total Value
		Heifers
	39-45	Number
	46-52	Total Value
		Calves
	53-59	Number
	60-66	Total Value
610	1-3	'610' Dairy - Sales or Transferred to Feeders
		Cows
	11-17	Number
	18-24	Total Value
		Bulls
	25-31	Number
	32-38	Total Value
		Heifers
	39-45	Number
	46-52	Total Value
		Calves
	53-59	Number
	60-66	Total Value

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
620	1-3	'620' Dairy - Ending Inventory
		Cows
	11-17	Number
	18-24	Total Value
		Bulls
	25-31	Number
	32-38	Total Value
		Heifers
	39-45	Number
	46-52	Total Value
		Calves
	53-59	Number
	60-66	Total Value
630	1-3	'630' Dairy - Milk Sales
	11-17	Total Pounds
	18-24	Average Butterfat Test
	25-31	Average Number of Cows in the Herd
640	1-3	'640' Beef Breeding - Beginning Inventory
		Cows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Bulls
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
650	1-3	'650' Beef Breeding - Beginning Inventory
		Heifers
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Calves
	32-38	Number
	39-45	Total Weight
	46-52	Total Value

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
660	1-3	'660' Beef Breeding - Purchases
		Cows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Bulls
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Heifers
	53-59	Number
	60-66	Total Weight
	67-73	Total Value
670	1-3	'670' Beef Breeding - Sales or Transferred to Feeders
		Cows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Bulls
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
680	1-3	'680' Beef Breeding - Sales or Transferred to Feeders
		Heifers
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Calves
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
690	1-3	'690' Beef Breeding - Ending Inventory
		Cows
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Bulls
	32-38	Number
	39-45	Total Weight
	46-52	Total Value

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
700	1-3	'700' Beef Breeding - Ending Inventory
		Heifers
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Calves
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
	53-59	Number of Cows Bred to Calve
	60-66	Number of Calves Saved
710	1-3	'710' Sheep - Beginning Inventory
		Ewes
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Rams
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Lambs
	53-59	Number
	60-66	Total Weight
	67-73	Total Value
720	1-3	'720' Sheep - Purchases
		Ewes
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Rams
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Lambs
	53-59	Number
	60-66	Total Weight
	67-73	Total Value
730	1-3	'730' Sheep - Sales
		Ewes
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Rams
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Lambs
	53-59	Number
	60-66	Total Weight

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
	67-73	Total Value
740	1-3	'740' Sheep - Ending Inventory
		Ewes
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
		Rams
	32-38	Number
	39-45	Total Weight
	46-52	Total Value
		Lambs
	53-59	Number
	60-66	Total Weight
	67-73	Total Value
750	1-3	'750' Sheep - Wool Sales
	11-17	Wool Sales - Pounds
	18-24	Number of Ewes Exposed
	25-31	Number of Lambs Born
760	1-3	'760' Beef Feeding - Begin Inventory
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
	32-38	Number Purchased or Transferred
	39-45	Total Weight
	46-52	Total Value
	53-59	Number Sales
	60-66	Total Weight
	67-73	Total Value
770	1-3	'770' Beef Feeding - Ending Inventory
	Ending Inventory	
	11-17	Number
	18-24	Total Weight
	25-31	Total Value
	32-38	Number Died
		Number

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
780	1-3	'780' Poultry
		Laying Hens
	11-17	Average number for year
	18-24	Eggs sold (dozen)
	25-31	Broilers - Number sold
	32-38	Turkeys - Number sold
	39-45	Broilers - Pounds sold
	46-52	Turkey - Pounds sold
790	1-3	'790' Labor Expressed in Average Hours Per Year Per Unit
	11-17	Dairy Cow
	18-24	Replacement Heifer - Dairy
	25-31	Litter Farrowed - To Weaning
	32-38	Market Hog - Weaning to Market - Per 1000 pounds gain
	39-45	Boar
	46-52	Beef Cow
800	1-3	'800' Labor Expressed in Average Hours Per Year Per Unit
	11-17	Bull - Beef
	18-24	Replacement Heifer - Beef
	25-31	Beef Feeder - Per 1000 Pounds Gain
	32-38	Poultry - Per 1000 laying birds
	39-45	Ewes and Lamb - to Weaning
	46-52	Lambs - Per 100 Pounds Gain
	53-59	Dairy Bull
	60-66	Turkeys - Per 1000 Pounds Sold
	67-73	Broilers - Per 1000 Pounds Sold
999	1-3	'999' Operator's Share of the Livestock Represented by the "Livestock Enterprise Analysis"
	11-17	Percent of total
850	1-3	'850' Enterprise Expense Distribution
		Cash Expenses
	11-17	Enterprise Code
	18-24	Hired Labor
	25-31	Farm Supplies
	32-38	Machinery Repairs
	39-45	Building, Fence, etc., Repairs
	46-52	Fuel, Oil, Grease (Farm Share)
	53-59	Utilities (Farm Share)
	60-66	Drying and Storage
	67-73	Miscellaneous Expense

FARM BUSINESS ANALYSIS CARD LAYOUTS

Card Code	Positions	Data Description or Value
851	1-3	'851' Enterprise Expense Distribution
		Cash Expenses
	11-17	Seeds and Plants
	18-24	Fertilizer and Lime
	25-31	Machine Hire and Trucking
	32-38	Auto Expenses (Farm Share)
	39-45	Interest on Notes and Mortgages (Farm Share)
	46-52	Veterinary and Medicine
	53-59	Breeding Fees and Regs
	60-66	Feeder Livestock Purchase
	67-73	Taxes (Farm Share)
	74-80	Rent (Cash)
852	1-3	'852' Enterprise Expense Distribution
		Cash Expense
	11-17	Insurance (Farm Share)
		Depreciation
	18-24	Building, Fence, Tile, Etc.
	25-31	Machinery, Equipment
	32-38	Purchasing Breeding Livestock
		Investment
	39-45	Investment (Dollars)

Card codes 853-998 are coded in the same format as 850-852. Each code is identified by the enterprise code entered. No omissions may occur in this Card Sequence (850 on). If a blank column or columns are mixed with columns with data, punch the columns with data consecutively. Blank cards (in areas other than cards 850 through 998) can either be omitted or have zews punched in the fields.

35 Minutes

LECTURE NOTES OHIO FARM BUSINESS ANALYSIS

I. INTRODUCTION

II. WHAT O.S.U. FARM BUSINESS ANALYSIS IS

1. Distribute promotional brochure
2. Computer financial analysis of farms & farm operations throughout Ohio
3. OSU Cooperative Extension Service and Vocational Agriculture

III. HOW OFBA OPERATES

1. Distribute input form 7363
2. Discuss input form
   a. Data collection
   b. Logic involved
3. Procedural
   a. Dates and time
   b. Cost
   c. Deadlines for running

IV. OUTPUT AND STATE SUMMARIES

1. Distribute summaries, financial highlights
2. Explain output via pp 4-9 in crop summary or dairy
   a. Gross farm income
   b. Total farm expenses
   c. Overhead and variable costs
   d. Net cash and net farm income
   e. Investment
   f. Unpaid labor and management income
   g. Cash receipts and expenses
   h. Capital gains/losses, inventories, depreciation, investments and ratio analysis

i. Labor

j. Crop production

k. Enterprise analysis: dairy/milk, swine, beef feeding, beef breeding, sheep, poultry, other livestock and crops

l. 18 different enterprises can be analyzed per farm

3. Year-end summaries

a. 5 summaries: dairy, dairy by herd size, swine, beef and general crops

b. Quantities 2,000-5,000 distributed state-wide, nationally (Agr. Universities) and internationally

c. Briefly discuss summary - tables, charts, etc.

V. QUESTIONS

25 Minutes

LECTURE NOTES OHIO FARM BUSINESS ANALYSIS

I. INTRODUCTION

1. Technical Assistant, full-time

2. OSU Grad; began working Jan., 1971

II. HOW OHIO FARM BUSINESS ANALYSIS IS ORGANIZED?

1. Via extension system

   a. Farmer to county agent to area farm management agent to OSU and back

2. Via vocational agriculture

   a. Farmer to vo ag instructor to Dr. John Starling to OSU and back

3. Overlap

   a. A little, different farmers served, no competition

III. HISTORY OF OFBA

1. Summaries dating back to 1939

   a. Approx. 800 farms hand analyzed that year

   b. Program moved from IRCC to hospital computers in 1972 (IBM 370 computer used)

2. Recent history (since computer used) numbers were:

Year	Total	Extension	Vo Ag.
1971	450	---	---
1972	462	322	140
1973	510	265	245
1974	595	238	357

3. Reasons for total increase

   a. Better program - continuity

   b. Operated more efficiently - timeliness

   c. More farmer confidence - past history looks better

4. Reasons for Vo Ag increase

   a. All of 3 above

   b. More JVS's and more push of program

   c. Vo ag confidence in program

5. Reasons for extension decrease

   a. Vo ag increase

   b. Too many programs to administer per agent

IV. KINDS OF FARMS ANALYZED

1. Typically neither largest nor smallest

2. Approximately 100,000 farms in Ohio, so we analyze about .6%

3. Few specialty farms, generally the "typical" farm - dairy, beef, swine, crop

4. Typical farms show up in 5 summaries produced

5. Cost is not deterrant (accountants would charge $300-$500 for similar analysis, plus taxes, etc.)

6. Young farmers organizations

7. Rapid adjustment farms

8. Other extension and vo ag programs

V. WHY FARMERS USE OFBA

1. Income statement

2. Production figures

3. Enterprise analysis

4. Financial analysis

5. Bankers desire it

6. Forces one to keep records

7. Is simplifed, accurate

8. Professional assistance (extension agents, vo-ag instructors, etc.) is free

9. CONFIDENTIAL

10. Comparisons (summaries) can be made with other farms in Ohio

11. Can be used in conjunction with ARC program

VI. VALUE TO UNIVERSITY

1. Research tool (thesis, dissertations, summaries, etc.) - data for state of Ohio

2. Data is raw and unweighted

3. Summaries are published

4. Public relations - keeps OSU in good standing with the rural population

VII. QUESTIONS

YEAR ____________

COUNTY ______ NO. ____________________ NAME /_/ EXT. /_/ VO. AG.

FARM NO.	DATE EDIT.	DATE P. & V.	ERROR	DATE ERROR RETURNED	DATE TAKEN BY TAYLOR	DATE MAILED OUT

No.	Date Received	Payment Received	Farm Operator's Name	Farm Operator's Number	Date Error returned to Operator	Date Error Free Farm returned here	Date Printout Returned	Number of Days Farm was here	Should Farm be omitted from Summary

1973
SINGLE CARD SUMMARY CODES

COLUMNS		INFORMATION	
1-2		AREA CODE	
3-4		COUNTY	
5-7		FARM NUMBER	
8-9		FARM TYPE	
10-11		OWNERSHIP CODE	
12-13		TYPE OF BUSINESS	
14-15		YEARS OF COOPERATION	
16	1,0	INCLUDE, NOT INCLUDE	TOTAL FARM
17	"	" "	ALL CROPS
18			CORN
19			SOYBEANS
20			OATS
21			WHEAT
22			ALFALFA
23			CLOVER, MIXED HAY
24			HAYLAGE
25			CORN SILAGE
26			GRASS SILAGE
27			GREEN CHOP
28			BARLEY
29			GRAIN SORGHUM
30			DIVERTED ACRES
31			TOMATOES
32			PICKLES
33			SUGAR BEETS
34			POTATOES
35			TOBACCO
36			DAIRY
37			SWINE
38			BEEF FEED
39			BEEF COW
40			SHEEP
41			POULTRY
42			OTHER LIVESTOCK
43			ROTATION PASTURE
44			PERMANENT PASTURE
45			OTHER SPECIAL CROP - 45
46			OTHER GENERAL CROP - 46
47			OTHER SPECIAL CROP - 47
48			OTHER SPECIAL CROP - 48
49			OTHER SPECIAL CROP - 49
50			OTHER SPECIAL CROP - 50
51			APPLES (code 35)
52			OTHER VEGETABLES (code 39)
53			SEED CORN (code 23)
54			OTHER GRAIN (code 09)
55			OTHER HAY (code 18)
56			SEED SOYBEANS (code 24)
57			POPCORN
58			OTHER SILAGE (code 22)
59			SWEET CORN
60			STRAWBERRIES
71-72		YEAR	
78-80		CARD NO. 1 - 700	

ENTERPRISES ANALYZED IN 1974

CODE	ENTERPRISE	INCLUDED IN SUMMARY	NOT INCLUDED IN SUMMARY	TOTAL FARMS WITH ENTERPRISE
01	Corn	185	57	242
02	Soybeans	156	54	210
03	Oats	70	33	103
04	Wheat	102	44	146
05	Barley	0	0	0
06	Grain Sorghum	1	1	2
09	Other Grain	5	7	12
10	Alfalfa Hay	31	20	51
11	Clover, Mixed Hay	51	22	73
12	Dehydrated Alfalfa	0	0	0
17	Green Chop	2	1	3
18	Other Hay	8	5	13
19	Haylage	16	7	23
20	Direct Cut Grass Silage	1	1	2
21	Corn Silage	15	52	67
22	Other Silage	2	0	2
23	Seed Corn	0	2	2
24	Seed Soybeans	2	1	3
25	Seed Wheat	0	0	0
26	Cabbage	0	0	0
27	Potatoes	0	1	1
28	Grapes	0	0	0
29	Sweet Corn	0	1	1
30	Tobacco	10	6	16
31	Sugar Beets	14	4	18
32	Tomatoes	7	7	14
33	Pickles	4	6	10
34	Popcorn	0	1	1
35	Apples	0	2	2
36	Peaches	0	0	0
37	Strawberries	0	1	1
38	Other Fruit	0	0	0
39	Other Vegetable	0	1	1
40	Rotation Pasture	9	7	16
42	Permanent Pasture	10	8	18
44	Diverted Acres	15	20	35
45	Other Special Crop	3	3	6
46	Other General Crop	1	5	6
47	Other Special Crop	4	16	20
48	Other Special Crop	0	0	0
49	Other Special Crop	0	0	0
50	Other Special Crop	0	2	2
51	Dairy	208	39	247
52	Swine	92	52	144
53	Feeder Cattle	69	71	140
54	Beef Cows	34	45	79
55	Sheep	25	28	53
56	Poultry	7	6	13
57	Other Livestock	2	1	3

ANALYSIS OF FARM NUMBERS IN 1974

NUMBER OF FARMS BY TYPE OF BUSINESS

1	Sole Proprietor	435
2	Partnership	97
3	Corporation	15
4	Other	7
		554 *

NUMBER OF FARMS RECEIVED PER AREA (Includes Extension & Vo. Ag.)

1	Defiance	42
2	Fremont	71
3	Wapakoneta	43
4	Mt. Gilead	66
5	Eaton	52
6	Washington C.H.	37
7	Wooster	170
8	Canfield	25
9	McConnelsville	22
10	Jackson	26
		554 *

NUMBER OF FARMS BY FARM TYPE

1	Dairy	255
2	Swine	50
3	Beef Feed	34
4	General Crop	131
5	Special Crop	12
6	Beef Breeding	13
7	Poultry	6
8	Sheep	5
9	General	48
		554 *

NUMBER OF FARMS BY OWNERSHIP

1	Full Owner	318
2	Part Owner, Part Tenant	152
3	Tenant Only	65
4	Absentee Owner	4
5	Tenant and Landlord	15
		554 *

* 554 Forms recieved as of March 25, 1975; date of this survey

Mailing List for FBA Summaries

State Staff of OSU Cooperative Extension Service

Roy M. Kottman, Director
George R. Gist, Associate Director
Ted L. Jones, Asst. Director - Agricultural Industry
David R. Miskell, Associate State Leader - Agricultural Industry
David H. Boyne, Chairman, Dept. Agricultural Economics and Rural Sociology

Area Staff

Area Extension Supervisors
Area Agents, Farm Management
Area Specialists (in summary related fields)

County Agents

in all Ohio counties

1974 FARM BUSINESS ANALYSES
Categorized By Vo-Ag/Extension, County and Area

County	Extension	Vo. Ag.
1. Adams	19	0
2. Allen	0	23
3. Ashland	10	7
4. Ashtabula	1	3
5. Athens	0	5
6. Auglaize	2	0
7. Belmont	1	0
8. Brown	0	0
9. Butler	0	0
10. Carroll	0	16
11. Champaign	5	4
12. Clark	2	0
13. Clermont	1	1
14. Clinton	3	0
15. Columbiana	0	1
16. Coshocton	5	2
17. Crawford	0	10
18. Cuyahoga	0	0
19. Darke	6	9
20. Defiance	0	2
21. Delaware	1	0
22. Erie	0	0
23. Fairfield	6	0
24. Fayette	2	0
25. Franklin	2	0
26. Fulton	3	8
27. Gallia	7	0
28. Geauga	0	0
29. Greene	2	1
30. Guernsey	0	2
31. Hamilton	1	0
32. Hancock	4	1
33. Hardin	0	2
34. Harrison	1	1
35. Henry	1	3
36. Highland	3	0
37. Hocking	0	4
38. Holmes	1	8
39. Huron	1	0
40. Jackson	2	0
41. Jefferson	2	0
42. Knox	9	5
43. Lake	0	0
44. Lawrence	4	0
45. Licking	16	1
46. Logan	4	0
47. Lorain	11	0
48. Lucas	0	4
49. Madison	0	0
50. Mahoning	0	0

County	Extension	Vo. Ag.
51. Marion	0	19
52. Medina	8	0
53. Meigs	6	1
54. Mercer	0	1
55. Miami	2	28
56. Monroe	2	0
57. Montgomery	3	5
58. Morgan	0	4
59. Morrow	3	3
60. Muskingum	3	0
61. Noble	0	0
62. Ottawa	2	2
63. Paulding	3	0
64. Perry	0	2
65. Pickaway	4	0
66. Pike	0	0
67. Portage	0	0
68. Preble	1	1
69. Putnam	0	0
70. Richland	2	4
71. Ross	2	0
72. Sandusky	4	27
73. Scioto	0	0
74. Seneca	5	0
75. Shelby	2	1
76. Stark	0	4
77. Summit	0	0
78. Trumbull	1	0
79. Tuscarawas	1	44
80. Union	3	9
81. Van Wert	3	0
82. Vinton	0	0
83. Warren	4	0
84. Washington	1	20
85. Wayne	2	74
86. Williams	3	3
87. Wood	4	14
88. Wyandot	6	30

Extension Area	Extension	Vo. Ag.
1. Defiance	21	31
2. Fremont	18	73
3. Wapakoneta	16	40
4. Mt. Gilead	39	32
5. Eaton	18	44
6. Washington C.H.	37	1
7. Wooster	38	135
8. Canfield	2	24
9. McConnelsville	10	29
10. Jackson	19	10
	218 Ext.	419 Vo. Ag. as of 6-3-75