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**ABSTRACT**

To improve vocational educational programs in agriculture, occupational information on a common core of basic skills within the occupational area of the farm manager (owner-operator) is presented in the revised task inventory survey. The purpose of the occupational survey was to identify a common core of basic skills which are performed and are essential for success in the occupation. Objectives were accomplished by constructing an initial task inventory to identify duty areas and task statements for the occupation. The initial task inventory was reviewed by consultants in the field, and 187 tasks were identified. A random sample of 67 farm managers (owner-operator) was obtained. Data were collected utilizing a questionnaire. Thirty-two completed questionnaires were returned. A compilation of basic sample background information is presented on kind of farm operation, years as a farmer, and preparation as a farm manager. A compilation of duty areas of work performed and work essential for the occupation is given. Percentage performance by incumbent workers and the average level of importance of specific task statements are presented in tabular form. (Author/EC)

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DETERMINATION OF A COMMON CORE  
OF BASIC SKILLS IN AGRIBUSINESS  
AND NATURAL RESOURCES

**An Empirical Determination**

**Of Tasks Essential To  
Successful**

**Performance As A**

**Farm Manager (Owner-Operator)**

DEPARTMENT OF AGRICULTURAL  
EDUCATION

THE OHIO STATE UNIVERSITY

COLUMBUS, OHIO 43210

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**AN EMPIRICAL DETERMINATION OF TASKS ESSENTIAL  
TO SUCCESSFUL PERFORMANCE AS A  
FARM MANAGER (OWNER-OPERATOR)**

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**in cooperation with**

**The Ohio State University Research Foundation**

**The Ohio State University**

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## FOREWORD

The Department of Agricultural Education at The Ohio State University is involved in a major programmatic effort to improve the curricula in education programs in agriculture. One product in this effort is this report of the farm manager (owner-operator) task inventory survey. The data reported were collected as part of a more comprehensive thrust designed to develop a common core of basic skills in agribusiness and natural resources.

It is hoped that the revised task inventory contained in this report will be useful to curriculum developers working for improved occupational relevance in schools. Twenty-seven additional inventories in other occupational areas are also reported from this project.

The profession owes its thanks to J. Rick Byrd, graduate research associate, for his work in preparing this report. Special appreciation is also expressed to Dr. John Starling, Professor in the Department of Agricultural Education at The Ohio State University and Area Supervisor of Vocational Education in Agriculture in Ohio, and local teachers of vocational agriculture for their help in securing the cooperation of those employed in this occupational area.

J. David McCracken  
Project Director

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## INTRODUCTION

Occupational information is needed to develop and revise vocational and technical education curricula. Teachers and curriculum developers generally determine which skills might be taught in a program based upon teacher expertise, advisory committee input, informal and formal community surveys, and/or task inventories.

The Agricultural Education Department at The Ohio State University has utilized and revised a system for obtaining and using occupational information as an effective aid in planning, improving, and updating occupational education curricula. This report presents the results of a survey of the occupation, farm manager (owner-operator). The information contained herein may be used by curriculum development specialists, teachers, local and state administrators, and others involved in planning and conducting vocational and technical programs in agriculture.

### Purpose and Objectives

The major purpose of the occupational survey was to identify the skills which are performed and essential for success as a farm manager (owner-operator). The specific objectives of this survey were as follows:

1. Develop and validate an initial task inventory for the farm manager (owner-operator).
2. Identify the specific management tasks performed by the farm manager (owner-operator).
3. Determine the relative importance of the specific management tasks to successful employment as a farm manager (owner-operator).

### Definition of the Occupational Area

The farm manager (owner-operator) assumes the responsibility for the overall management of the farm(s) owned by himself and/or others. The specific overall farm management tasks performed will depend on the size of farm(s) and the kind of crops and/or livestock raised. In general, his work includes planning, coordinating, and directing the overall farm operation. The farm manager (owner-operator) determines land use and crop rotations; plans and supervises planting, cultivation, harvesting, and storage of crops; plans livestock programs; purchases supplies; plans the machinery and equipment program; plans the farm finance program; keeps necessary records; and supervises the farm labor supply.

### METHODOLOGY

Objectives were accomplished by constructing an initial task inventory, validating the initial inventory, selecting a sample of workers, collecting data, and analyzing data.

### Initial Task Inventory

Duty areas and task statements for the farm manager (owner-operator) were identified by searching existing task lists, job descriptions, curriculum guides, and reference publications. Additionally, contacts with farm management specialists at The Ohio State University aided in clarifying the specific responsibilities of the farm manager (owner-operator). All the tasks that the project staff thought to be performed were assembled into one composite list.

The initial tasks were grouped into functional areas called "Duties".

After the task statements were grouped under the proper duty areas, each task statement was reviewed for brevity, clarity, and consistency. In all, 193 task statements were included in the initial task inventory.

#### Initial Inventory Validation

After the initial task inventory was constructed, it was reviewed by four consultants. These consultants were either farmers or local teachers of vocational agriculture.

The consultants were asked to respond to the initial task list inventory by performing the following activities:

1. Indicate whether any of the tasks listed were not appropriate.
2. Add any additional tasks they believed were performed by the farm manager (owner-operator).
3. Make changes in the wording of tasks to help add clarity to the statements.

The comments from the four consultants were pooled and needed revisions were made. One new duty area was added as a result of the review process. The farm manager (owner-operator) questionnaire included tasks and duties related to overall farm management which generally were not unique to the management of specific crop or livestock enterprises. Management duties and tasks which generally were unique to crop or livestock enterprises were included in the dairy farmer, swine farmer, cattle farmer, horse farm hand, grain farmer, forage producer, and/or commercial vegetable producer questionnaire.

As a result of the initial task inventory review process, 187 tasks were identified.

#### Worker Sample Selection

An attempt was made to survey farm managers (owner-operators) from all areas of the state with various sizes and kinds of farm operations. A sample of 67 farm managers (owner-operators) was obtained from the 1974-75 directory of the Ohio Young Farmers Association, Inc. and the 1974-75 enrollees in Farm Business Planning and Analysis programs in Ohio using a multi-stage random sampling approach. The stages used in the sampling approach were

local Ohio Young Farmers Association, Inc. chapter or Farm Business Planning and Analysis program and individual member.

### Data Collection

A packet of materials was sent to the randomly selected farm manager (owner-operator). The packet of materials included:

1. A cover letter from the Agricultural Education Department at The Ohio State University.
2. A questionnaire printed on yellow.
3. A stamped and self-addressed return envelope.

The farm manager (owner-operator) was instructed to complete the questionnaire and return it in the stamped and self-addressed return envelope by the date specified in the cover letter.

A follow-up of non-respondents consisted of mailing a packet of materials two weeks after the initial mailing. The follow-up consisted of a packet of materials identical to the initial packet.

### Data Analysis

The 32 questionnaires which were returned were checked for completeness and accuracy by the project staff. Information from the 32 usable responses was coded on Fortran coding sheets for key punching. In addition to coding appropriate respondent background information, each specific task statement was coded as to whether it was performed (1 = Task performed by respondent; blank = Task not performed by respondent) and the level of importance of the task (3 = Essential; 2 = Useful; 1 = Not Important). The information was keypunched on IBM cards and verified by personnel at the Instruction and Research Computer Center at The Ohio State University.

The data was analyzed using the SOUPAC computer program and the facilities of the Instruction and Research Computer Center. Consultant assistance for analyzing the data was provided by personnel at The Center for Vocational Education. The SOUPAC computer analysis resulted in the computation of relative frequencies, means, and rankings for each task statement. The results of the computer analyses were printed in tabular form for ease of interpretation.

## FINDINGS

Objectives of the study resulted in the compilation of basic sample background information, the determination of tasks performed by the farm manager (owner-operator), and the identification of tasks essential to successful performance as a farm manager (owner-operator).

### Description of the Sample

Information regarding the performance of management tasks and the importance of the management tasks to successful employment as a farm manager (owner-operator) was obtained from farm managers (owners-operators) across Ohio.

### Response to the Survey

A total of 67 questionnaires were mailed and 32 replies were received. This represented a 48.9% rate of return. The response to the questionnaire is summarized in TABLE I.

TABLE I

FARM MANAGER(OWNER-OPERATOR)  
RESPONSE TO THE QUESTIONNAIRE

	N	Percent Of Farmers In The Survey
Farmers in Survey	67	100.0
Total Returns	32	48.9
Usable Returns	32	48.9
Unusable Returns	0	0
Nonrespondents	35	51.1

### Kind of Farm Operation

Farm managers (owners-operators) from various kinds of farms were included in the study. The major enterprises on the farm were used as an index to assess the kind of farm being managed. Of the 32 questionnaires received, 32 included information regarding the major income producing enterprises on the farm. TABLE II summarizes the responses to the question, "What are the major crops and/or livestock raised on your farm?" Thirty-one

of the farmers or 97% indicated corn was one of the major enterprises raised on their farms. Twenty-four or 75% of the farmers indicated small grains, mainly wheat and oats, were one of the major enterprises grown. Sixteen or 50% of the farmers indicated forage crops were produced on their farms. Fifteen farmers or 47% indicated beef/cattle production was one of the major enterprises on their farms. Fourteen of the farmers or 44% indicated that the dairy enterprise provided a substantial amount of income on their farms. An analysis of TABLE II suggests that the farmers responding to the farm manager (owner-operator) survey had several major enterprises on their farms.

TABLE II  
KIND OF FARM OPERATION  
(Major Enterprises on the Farm)

Enterprise	N	Percent of Respondents
Dairy	14	44.0
Beef	15	47.0
Swine	7	22.0
Forage Crops	16	50.0
Corn	31	97.0
Small Grains	24	75.0

#### Years as a Farmer

Farm managers (owners-operators) with varying amounts of experience in farming were included in the study. TABLE III summarizes the responses to the question, "How many total years have you been a farmer?" Ten farm managers (owners-operators) or 31.2% had been a farmer from 9-16 years. Eight or 25% of the farm managers had been a farmer from one to eight years. Six or 18.8% of the farm managers had been a farmer from 17-24 years. The total years of experience as a farmer ranged from 2-40 years. Farm managers (owners-operators) had an average of 16.3 years of total experience as a farmer.

#### Preparation as a Farmer

Farm managers (owners-operators) obtained training as a farmer from various sources. TABLE IV summarizes their responses to the question, "Where did you receive your training as a farmer?" Thirty-two farm managers (owners-operators) or 100%

TABLE III  
TOTAL AMOUNT OF EXPERIENCE IN FARMING

Years	N	Percent of Respondents
1-8	8	25.0
9-16	10	31.2
17-24	6	18.8
25-32	4	12.5
33 or more	4	12.5
Total	32	100.0

$\bar{X}$  years as a farmer = 16.3

TABLE IV  
SOURCE OF TRAINING RECEIVED AS A FARMER

Source	N	Percent of All Farmers In the Survey
On-The-Job	32	100.0
High School Program	22	68.8
Technical School Program	2	6.3
College/University Program	6	18.8
Adult Education Program	28	87.5
Other	4	12.5

indicated they received training on-the-job. Twenty-eight or 87.5% indicated they received training as a farmer by attending adult education classes. Twenty-two farm managers or 68.8% indicated they had received training as a farmer by attending a high school program in vocational agriculture. Six of the farm managers or 18.8% indicated they received preparation as a farmer through a college/university program.

Duty Areas of Work Performed by the  
Farm Manager (Owner-Operator)

The 187 tasks were grouped under 16 duty areas. Each respondent indicated whether he performed the specific task in his current position as a farm manager (owner-operator). The percentages of respondents performing each task were averaged for all tasks under each duty area. The mean percentage of farm managers (owners-operators) who performed specific tasks in specified duty areas is presented in TABLE V.

Duty areas of work in which 50% or more of the farm managers (owners-operators) performed the tasks were:

1. Performing General Office Work
2. Recording Information
3. Inventorying the Farm Business
4. Observing Legal Requirements and Regulations
5. Planning and Supervising the Labor Supply
6. Purchasing Supplies
7. Insuring the Farm Business
8. Planning and Organizing the Farm Business
9. Summarizing and Analyzing the Farm Business Records
10. Marketing Agricultural Products
11. Planning Farm Buildings and Structures
12. Planning the Farm Equipment and Machinery Program
13. Planning the Livestock Program
14. Planning the Crop Program
15. Financing the Farm Business
16. Securing Land

Duty Areas of Work Essential for  
Successful Performance as a Farm Manager (Owner-Operator)

A level of importance rating was obtained for each task. The respondent could rate the task as essential, useful, or not important for successful performance as a farm manager (owner-operator). A ranking of essential was assigned a numerical rating of "3", useful a numerical rating of "2", and not important a numerical rating of "1". The level of importance ratings for each task were averaged for all tasks under each duty area. The average level of importance ratings for the specific tasks in the specified duty areas are presented in TABLE V.

Duty areas of work which received a 2.0 or higher level of importance rating by incumbent workers were:

1. Performing General Office Work

2. Recording Information
3. Inventorying the Farm Business
4. Observing Legal Requirements and Regulations
5. Planning and Supervising the Labor Supply
6. Purchasing Supplies
7. Insuring the Farm Business
8. Planning and Organizing the Farm Business
9. Summarizing and Analyzing the Farm Business Records
10. Marketing Agricultural Products
11. Planning Farm Buildings and Structures
12. Planning the Farm Equipment and Machinery Program
13. Planning the Livestock Program
14. Planning the Crop Program
15. Financing the Farm Business
16. Securing Land

Percentage Performance and Level of Importance  
Ratings of Specific Tasks

The percentage performance by incumbent workers and the level of importance for each specific task is also presented in TABLE V.

It is recommended that the results for each specific task be examined by educators and others who are developing educational programs to determine curriculum content for preparing farm managers (owners-operators). Specific tasks with a high level of performance and a high level of importance rating should be given more emphasis in the educational program than specific tasks with a low level of performance and a low level of importance rating.

TABLE V

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE\*  
OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
<b>Performing General Office Work</b>		
File records and information . . . . .	90	2.9
Meet with people . . . . .	93	2.3
Schedule appointments. . . . .	68	2.1
Use telephone. . . . .	93	2.7
Write notes, memos, and letters. . . . .	84	2.4
Use two-way radio. . . . .	25	1.6
Mean Rating. . . . .	75.5	2.3
<b>Recording Information</b>		
Make bank deposits . . . . .	81	2.7
Balance bank statements. . . . .	93	2.8
Maintain accounts payable and receivable . . . . .	81	2.7
Write checks . . . . .	93	2.8
Record inventory information . . . . .	90	2.6
Record crop production information . . . . .	90	2.5
Record equipment maintenance information . . . . .	84	2.4
Record labor information . . . . .	81	2.3
Record livestock production information. . . . .	81	2.7
Record farm receipts . . . . .	90	2.8
Record farm expenses . . . . .	90	2.8
Maintain monthly summary of cash expenses and receipts . . . . .	75	2.3
Determine the kind of records to keep. . . . .	81	2.5
Mean Rating. . . . .	85.4	2.6
<b>Inventorizing the Farm Business</b>		
Take physical inventory. . . . .	87	2.4
Determine inventory on hand. . . . .	87	2.4
Calculate depreciation . . . . .	87	2.6
Determine when to take inventory . . . . .	78	2.1
Determine salvage values of depreciable assets . . . . .	81	2.2
Establish values on assets and chattels. . . . .	87	2.4
Identify resources to be inventoried . . . . .	75	2.3
Identify resources which are depreciable and non-depreciable	81	2.4

\*Average rating of importance may range from 1-3 with 3 being the highest

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
Select proper depreciation schedules to use. . . . .	90	2.4
Mean Rating. . . . .	83.7	2.4
<b>Observing Legal Requirements and Regulations</b>		
Determine when to consult lawyers and specialists. . . . .	81	2.5
Evaluate the regulations of various government programs. . . . .	96	2.5
Follow legal procedures for purchasing land. . . . .	71	2.5
Follow legal regulations regarding inheritance . . . . .	65	2.3
Identify the property rights of owners . . . . .	78	2.7
Identify the rights and liabilities of tenants and landlords . . . . .	71	2.5
Interpret regulations regarding operation of vehicles by minors . . . . .	78	2.6
Mean Rating. . . . .	77.1	2.5
<b>Planning and Supervising the Labor Supply</b>		
Plan work schedules. . . . .	78	2.4
Establish priorities on work to be completed . . . . .	90	2.8
Identify peak labor periods. . . . .	81	2.7
Determine amount of labor needed . . . . .	81	2.8
Hire and fire workers. . . . .	71	2.6
Train workers to perform tasks . . . . .	71	2.5
Evaluate workers performance . . . . .	71	2.4
Assign specific responsibilities to workers. . . . .	68	2.4
Establish pay scale and benefits for workers . . . . .	65	2.5
Identify labor available . . . . .	62	2.3
Evaluate influence labor utilization has on farm income. . . . .	68	2.5
Identify ways to reduce inefficient use of labor . . . . .	68	2.6
Determine whether to hire more labor or hire custom services . . . . .	78	2.7
Determine whether to do work yourself or hire it done. . . . .	93	2.8
Mean Rating. . . . .	74.6	2.6
<b>Purchasing Supplies</b>		
Determine amount to order. . . . .	96	2.8
Determine what to order. . . . .	96	2.8
Determine when to order. . . . .	93	2.7



PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE  
OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
Compare costs and quality of products from various sources . . . . .	96	2.7
Determine amount of supplies to keep on hand . . . . .	96	2.7
Identify sources of supplies . . . . .	90	2.5
Evaluate future supply needs . . . . .	90	2.6
<b>Mean Rating.</b> . . . . .	<b>93.9</b>	<b>2.7</b>
<b>Insuring the Farm Business</b>		
Determine the amount of insurance needed . . . . .	96	2.8
Determine the kind and type of insurance needed. . . . .	96	2.8
Determine what to insure . . . . .	93	2.8
Determine when to insure . . . . .	96	2.7
Evaluate advantages and disadvantages of insurance plans . . . . .	90	2.7
Identify sources of insurance. . . . .	93	2.5
<b>Mean Rating.</b> . . . . .	<b>94.0</b>	<b>2.7</b>
<b>Planning and Organizing the Farm Business</b>		
Determine the type of farm to be developed . . . . .	81	2.9
Determine the size of farm to be developed . . . . .	78	2.8
Determine whether to have joint ownership. . . . .	78	2.4
Determine whether to incorporate . . . . .	59	1.9
Determine whether to participate in government programs. . . . .	87	2.3
Determine whether to specialize or diversify . . . . .	87	2.5
Develop overall farm plan. . . . .	87	2.7
Establish farm family goals. . . . .	81	2.5
Establish priorities for utilization of resources. . . . .	81	2.3
Identify improvements to be made . . . . .	90	2.4
<b>Mean Rating.</b> . . . . .	<b>80.9</b>	<b>2.5</b>
<b>Summarizing and Analyzing the Farm Business Records</b>		
Calculate crop production efficiency factors . . . . .	84	2.7
Calculate family labor and management income . . . . .	87	2.4
Calculate investment credit. . . . .	87	2.8
Calculate labor efficiency factors . . . . .	75	2.3
Calculate livestock production efficiency factors. . . . .	71	2.4

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE  
OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
Calculate machinery use efficiency factors . . . . .	68	2.3
Calculate management income . . . . .	75	2.4
Calculate net farm equity . . . . .	84	2.5
Calculate net farm profit . . . . .	90	2.8
Calculate net return to capital . . . . .	71	2.5
Calculate rate of capital turnover . . . . .	68	2.4
Calculate rate of return to capital . . . . .	71	2.5
Calculate operating margin . . . . .	65	2.5
Calculate percent of gross income absorbed by overhead . . . . .	65	2.5
Close and summarize the cash book at end of year . . . . .	84	2.9
Complete tax forms . . . . .	84	2.7
Decide whether to pay taxes on cash or accrual basis . . . . .	78	2.6
Determine amount of social security to be paid . . . . .	87	2.7
Determine amount of taxes to be paid . . . . .	81	2.6
Determine capital gains or losses . . . . .	87	2.8
Determine the personal and farm share of expenses . . . . .	90	2.7
Estimate income tax . . . . .	59	2.3
Identify strengths and weaknesses of farm business . . . . .	84	2.7
Make ten-month summary of cash expenses and receipts . . . . .	71	2.2
Mean Rating . . . . .	77.8	2.6
<b>Marketing Agricultural Products</b>		
Calculate expected returns and profits on sales . . . . .	84	2.5
Determine feasibility of participating in futures market . . . . .	46	1.8
Select markets . . . . .	71	2.4
Interpret market reports . . . . .	68	2.1
Analyze market cycles . . . . .	59	2.1
Select appropriate marketing system . . . . .	68	2.5
Determine influence middlemen have on farmer's prices . . . . .	62	2.3
Determine if products should be held over for another year's income . . . . .	84	2.6
Determine when to market . . . . .	75	2.5
Develop marketing plan . . . . .	59	2.1
Determine influence substitutes have on agricultural products . . . . .	59	2.1
Determine when products are ready for market . . . . .	50	1.9
Determine influence supply and demand has on prices . . . . .	71	2.4
Mean Rating . . . . .	65.8	2.3

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE  
OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
<b>Planning Farm Buildings and Structures</b>		
Calculate construction, remodeling, and repair costs . . . . .	81	2.6
Determine returns expected from building investments . . . . .	81	2.6
Determine size of buildings and structures needed. . . . .	87	2.6
Determine whether permanent or temporary structures should be constructed. . . . .	75	2.6
Determine whether single purpose or multiple purpose buildings are needed. . . . .	81	2.6
Determine whether to remodel or replace current buildings and structures. . . . .	87	2.6
Determine where to locate buildings and structures . . . . .	90	2.7
Estimate future building and structure needs . . . . .	75	2.5
Evaluate advantages and disadvantages of specific kinds and types of buildings and structures . . . . .	78	2.5
Identify building repairs needed . . . . .	90	2.5
Select type of building materials to be used . . . . .	84	2.3
Work with others in designing and planning buildings and structures. . . . .	90	2.6
Select mechanical systems for use in buildings . . . . .	81	2.4
Mean Rating. . . . .	80.0	2.5
<b>Planning the Farm Equipment and Machinery Program</b>		
Calculate equipment operation costs. . . . .	87	2.4
Determine current conditions of machinery and equipment. . . . .	93	2.7
Determine size of machinery and equipment to purchase. . . . .	96	2.8
Determine what machinery and equipment is needed . . . . .	96	2.8
Determine whether to do custom work for others . . . . .	87	2.5
Determine whether to own machinery or lease it . . . . .	78	2.3
Determine whether to own equipment needed or hire custom work done . . . . .	87	2.6
Determine whether to repair equipment or hire work done. . . . .	93	2.4
Determine whether to repair or trade-in equipment and machinery . . . . .	96	2.8
Determine whether to purchase new or used machinery and equipment . . . . .	93	2.7
Determine returns expected from equipment and machinery investments . . . . .	78	2.5

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE  
OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
Develop regular equipment and machinery maintenance schedule . . . . .	84	2.6
Evaluate advantages and disadvantages of specific types and brands of equipment and machinery . . . . .	90	2.7
Evaluate possibility of joint ownership of equipment and machinery . . . . .	71	2.2
Identify equipment repairs needed. . . . .	90	2.8
Identify ways to reduce equipment and machinery costs. . . . .	90	2.8
<b>Mean Rating. . . . .</b>	<b>88.0</b>	<b>2.8</b>
<b>Planning the Livestock Program</b>		
Determine amount of feed to be purchased in addition to home grown feeds. . . . .	81	2.6
Determine resources needed for livestock program . . . . .	78	2.7
Determine the amount of livestock for the farm . . . . .	81	2.6
Determine the grade of livestock for the farm. . . . .	78	2.4
Determine whether to expand or contract the livestock enterprises . . . . .	71	2.4
Develop livestock planning budgets . . . . .	46	2.0
Establish livestock enterprise production goals. . . . .	71	2.4
Identify resources available for the livestock enterprises . . . . .	68	2.3
Identify special production practices needed to attain production goals. . . . .	65	2.4
Identify ways to increase the efficiency of the livestock program . . . . .	84	2.6
Determine the type of livestock for the farm . . . . .	78	2.3
Develop livestock budgets. . . . .	50	2.1
<b>Mean Rating. . . . .</b>	<b>70.9</b>	<b>2.4</b>
<b>Planning the Crop Program</b>		
Determine amount of crops to be grown. . . . .	96	2.8
Determine crop enterprises for the farm. . . . .	96	2.7
Determine crop rotations to be followed. . . . .	96	2.6
Determine whether to expand or contract crop enterprises . . . . .	90	2.7
Develop crop budgets . . . . .	68	2.4
Develop crop production schedule for farm. . . . .	87	2.7
Establish crop production goals. . . . .	87	2.6

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE  
OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
Identify resources available for crop program. . . . .	84	2.7
Identify special production practices needed to attain production goals. . . . .	84	2.7
Identify ways to increase crop efficiency. . . . .	93	2.8
Identify resources needed for the crop program . . . . .	84	2.7
Plan field layout. . . . .	90	2.5
Mean Rating. . . . .	87.9	2.7
<b>Financing the Farm Business</b>		
Calculate interest rates . . . . .	87	2.8
Determine amount of credit needed. . . . .	90	2.9
Determine length of loan needed. . . . .	90	2.9
Develop budget to determine if it will pay to borrow money . .	81	2.8
Develop debt repayment schedule. . . . .	84	2.8
Develop overall credit plan needed for farm. . . . .	78	2.8
Evaluate importance of good credit ratings . . . . .	81	2.7
Evaluate interest terms on loans . . . . .	84	2.8
Evaluate loan repayment terms and conditions . . . . .	87	2.7
Evaluate repayment capacity. . . . .	81	2.7
Identify and evaluate various sources of credit. . . . .	81	2.6
Identify factors which influence credit ratings. . . . .	81	2.5
Identify purposes for which credit is needed . . . . .	84	2.6
Identify the credit strengths and weaknesses of the farm business. . . . .	71	2.5
Mean Rating. . . . .	82.9	2.7
<b>Securing Land</b>		
Determine amount of capital available for securing land. . . .	81	2.7
Determine amount of land needed. . . . .	81	2.7
Determine if the land available fits the future farm plan. . .	75	2.4
Determine the type of farm and land needed . . . . .	78	2.6
Determine when to buy land . . . . .	68	2.4
Determine whether to buy, rent, or lease land. . . . .	81	2.7
Evaluate land price cycles . . . . .	68	2.5
Evaluate lease and rental agreements . . . . .	78	2.7
Identify available land. . . . .	75	2.4

PERCENTAGE PERFORMANCE AND AVERAGE RATING OF IMPORTANCE OF SPECIFIC TASKS

TASK STATEMENTS	Percent Performing	Average Level of Importance
Identify factors that will influence utilization of available land. . . . .	78	2.5
Make an appraisal of the land and buildings. . . . .	78	2.6
Mean Rating. . . . .	76.5	2.6