NONFARM AGRICULTURAL EMPLOYMENT IN LOUISIANA WITH
IMPLICATIONS FOR DEVELOPING TRAINING PROGRAMS.
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LOUISIANA ST. UNIV., BATON ROUGE
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DESCRIPTORS- #OFF FARM AGRICULTURAL OCCUPATIONS, #EDUCATIONAL NEEDS, #EMPLOYMENT OPPORTUNITIES, #OCCUPATIONAL SURVEYS, #EMPLOYMENT QUALIFICATIONS, AGRICULTURAL SKILLS, OCCUPATIONAL CLUSTERS, LOUISIANA,

THE COMBINED RESULTS OF THE STUDIES OF SEVEN
METROPOLITAN CENTERS AND 90 SEMI-URBAN AND RURAL TOWNS IN
LOUISIANA SHOWED (1) THE NUMBER OF PEOPLE EMPLOYED, NUMBER
NEEDING AGRICULTURAL COMPETENCIES, EXPECTED NUMBER TO BE
HIRED, AND NUMBER OF JOB TITLES, (2) CHARACTERISTICS OF
EMPLOYEES SUCH AS AGE, EDUCATION, BACKGROUND, AND SALARY, AND
(3) AGRICULTURAL COMPETENCIES NEEDED TO ENTER, CONTINUE, AND
ADVANCE IN THE FIRMS. IN 2,430 BUSINESSES AND AGENCIES
SURVEYED, 51,719 WORKERS WERE EMPLOYED OF WHICH 20,025 IN
1,699 JOB TITLES NEEDED AGRICULTURAL COMPETENCIES. JOB TITLES
WERE EXPECTED TO INCREASE BY 9.5 PERCENT WITHIN 5 YEARS. THE
GREATEST NUMBER OF WORKERS WERE IN THE OCCUPATIONAL FAMILIES
(1) CROPS, FORESTRY, AND SOIL CONSERVATION, (2) FARM SUPPLIES
AND EQUIPMENT, (3) LIVESTOCK AND POULTRY, AND (4)
AGRICULTURAL SERVICES, AND IN THE SEMISKILLED MANAGERIAL,
SKILLED, AND SALES EMPLOYMENT LEVELS. TECHNICIAN LEVEL
EMPLOYEES RANKED SEVENTH IN TOTAL NUMBER OF WORKERS AND WERE
MOST NUMEROUS IN AGRICULTURAL SERVICE. MOST EMPLOYERS
REQUIRED A MINIMUM JOB-ENTRY AGE OF 23 AND A HIGH SCHOOL
EDUCATION FOR ENTRY INTO THE OCCUPATIONS, AND MOST PREFERRED
A FARM BACKGROUND FOR A MAJORITY OF THE POSITIONS. OTHER
FINDINGS CONCERNED PROMOTION, PREREQUISITE EDUCATION,
AGRICULTURAL COMPETENCIES, INSERVICE TRAINING, LICENSING,
GROWTH, AND SUPPLY. TEN RECOMMENDATIONS CONCERNED CURRICULUM
CHANGES, WORK EXPERIENCE, CONTINUING EDUCATION, SCHOOL
RESPONSIBILITY FOR JOB PLACEMENT AND FOLLOWUP, AND RESEARCH
AND DEVELOPMENT. AREA AND OTHER RELATED STUDIES ARE REPORTED
IN VT 004 783 - VT 004 787. (JM)
NONFARM AGRICULTURAL EMPLOYMENT IN LOUISIANA WITH IMPLICATIONS FOR DEVELOPING TRAINING PROGRAMS

Cooperative Research Project
OE 5-85-040

2,430 Nonfarm Agricultural Businesses
51,719 Employees
20,025 Workers with Agri. Competencies
1,699 Job Titles

Department of Vocational Agriculture Education
School of Vocational Education
College of Agriculture
Louisiana State University
Baton Rouge
NONFARM AGRICULTURAL EMPLOYMENT IN LOUISIANA
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C. L. Mondart, Sr.
C. M. Curtis

DEPARTMENT OF VOCATIONAL AGRICULTURAL EDUCATION

SCHOOL OF VOCATIONAL EDUCATION

COLLEGE OF AGRICULTURE

LOUISIANA STATE UNIVERSITY

June, 1967

The research reported herein was supported by the Cooperative Research Program of the Office of Education, U.S. Department of Health, Education and Welfare; funded under Section 4 (c) of the National Vocational Education Act of 1963.
SCOPE OF STUDY

Area I
Area II
Area III
Area IV
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INTRODUCTION OF THE STUDY

Rural boys are constantly under pressure to improve their chances for finding and pursuing a satisfactory career. For them proper choice of an occupation is a very special problem, demanding unusual treatment. They face career barriers not common to other youth, for more than one-half of them must migrate to populated centers to seek occupational opportunities. There -- on the home grounds of better prepared youth -- they must compete for suitable careers.

Fortunately, most rural boys have a "built-in" vocational advantage, providing they choose among the great host of occupations available to them in agriculture. Their apprenticeship on the farm is the key to the edge they hold over others having similar career aspirations.

Actually, growing up on the farm gives a boy a head start towards an occupation. It provides him with an occupational background the city boy can't acquire -- an understanding of farm and rural life. For, farm experience is definitely preferred to hold thousands of different jobs that have connections with farming. Moreover, knowledge and skill in agricultural subjects acquired above the apprenticeship level have real market value in the work world.
Clearly, it is to the interest of the national economy not to let farm know-how and experience go to waste.

Unquestionably, there is no more satisfying life than being a farmer -- 40 acres, a horse, a milk cow and a gun constituted the first great American dream. If a boy wants and can farm -- has the necessary land and capital or can get it -- then he certainly ought to farm, for his production can be vastly important to the general welfare.

But, the simple truth is that relatively few rural boys can become owners and operators of successful farms. Logically, the rest of them -- those who must plan a lifetime away from the farm -- should be encouraged to use their occupational assets most effectively -- in agricultural careers that are farm connected.

Agriculture in the state and nation has experienced startling developments at amazing speeds. Advancing farm technology and mechanization, in addition to the use of petro-chemicals in plant and animal protection, have combined to make possible greater production with fewer farm workers. Moreover, specialized production has followed the constant pressure for the substitution of capital for labor. As a consequence, farmers have grown more dependent upon others besides farm laborers, as their operations grow larger and more complex.

Agricultural communities now tend towards urban-country communities having greatly diversified but common interests--the production, processing and marketing of farm products. Farmers now look to a battery of businesses and agencies in town to service their production requirements, while still another group of town concerns look to the farmers for raw products to process and market.
This is but a portion of the long and consistent pattern of change in farming, including the substitution of increasing amounts of capital for labor, larger and fewer farms with more specialization, the movement towards more mechanization, and the use of petro-chemical products in farm production.

Emerging in towns and cities, along with changes on the farm, is a large and growing segment of the economy known as nonfarm agricultural business, a vital part of the agricultural industry. It offers proof that advancing technology does not necessarily result in a new loss of jobs, but actually creates new jobs and occupations which require workers with new skills. Undoubtedly, many people of both sexes who have left the farm can be found employed in urban areas by businesses engaged in servicing the farmer or handling his products.

Unfortunately, little information has been available showing actual numbers employed, the jobs held, worker qualifications and compensation, along with the kind and number of employing concerns involved.

Yet, generally, it is known that occupations connected with farming are increasing, as farm workers decrease. The business of handling farm machinery and equipment serves to illustrate this development: tractors and tractor equipment save countless man hours on the farm, but many knowledgeable workers are required off the farm to design, manufacture, distribute and service these machines.

It is towards these kinds of jobs that great numbers of youth leaving the farm may wisely direct themselves, assuming that they will obtain the considerable amount of education and training required for job entry and progress, for jobs in nonfarm agricultural businesses are distinctive and require workers to function predictably.
Adjusting human resources on the farm to the needs of agriculture is a major problem of the middle 1960's and the decade ahead, principally because the farm has more youth than can be profitably employed as adults. Estimates indicate that in the decade ahead, only one commercial farm will be available for each 10 farm reared boys reaching maturity.

A logical solution to the problem lies in efforts to step up occupational training to include retraining and guidance programs at the high school level so excess farm-reared youth may move into occupations offering them the best opportunity to "cash-in" on their farm experience. Logically adjusting the educational system for rural youth to provide them with the necessary occupational training to meet the requirements of modern agriculture is a process that must take into account the occupations making up the nonfarm sectors of the economy.

This need to identify jobs in nonfarm agriculture has long existed, together with training programs at the high school level to prepare farm youth for them. Appreciable acknowledgment of the need was made in December of 1963, when the State Board of Liquidation of the State Debt agreed to underwrite a survey of nonfarm agricultural occupations in the major metropolitan areas of the state.

These areas were found to contain 1,067 businesses and agencies considered a part of the agricultural economy. Together they employed 30,300 workers, and of this number 9,087 were required to have agricultural competencies relating to 1,582 different job titles.

Agricultural jobs of even more importance to farm youth are those located nearest to them -- those in agricultural businesses and agencies located outside the metropolitan areas in the host of the more rural
centers of population. Moreover, occupational opportunities in nonfarm agriculture offered by agricultural concerns located in the towns and villages of the state may equal or even exceed those in the metropolitan areas. The chief concern of this study was to identify and describe all non-farm agricultural jobs in both city and village.

**Design of the Study**

This research grew out of provisions of the Morse-Perkins Act (P.L. 88-210) which relate specifically to vocational agriculture and job training.

...any amounts (money) allotted for vocational agriculture may be used for vocational education in any occupation involving knowledge and skill in agricultural subjects...; and

...(provide) vocational education which is realistic in the light of actual or anticipated opportunities for gainful employment...suited to the ... needs, interests and ability to benefit from such training...

Clearly, these provisions encourage the development of new programs in vocational agriculture, leading to careers in agriculture other than farm production.-- that the traditional program, to train for proficiency in farming occupations, must give way to more comprehensive training made up of several courses of study; all in preparation for agricultural careers but involving different agricultural knowledge and skills.

Equally clear in the Act is the provision defining the quality of training to be provided -- that it be realistically geared to actual job opportunities and offered to those who have the interest, need and ability to profit from such training.

Presumably, there is a place in agriculture for farm youth who wish to remain within the general framework of the industry, but are
unable to or do not aspire to farming as a career. Where this place is and what it will take in the way of education and training to get there is a major concern of this research.

The Problem

This research was designed to discover nonfarm agricultural jobs in Louisiana, to identify the agricultural competencies they require, and to classify them by occupations or clusters for use as bases for developing programs in vocational agriculture. More specifically the objectives were:

1. To identify and describe present and emerging agricultural occupations, other than farming and ranching, for which knowledge and skill in agriculture is a requirement for job entry;
2. To develop job title descriptions for titles found in all nonfarm agricultural occupational families;
3. To cluster or categorize job titles according to major sectors of nonfarm agricultural occupational families;
4. To develop suggested training programs for use in vocational agriculture classes having students with occupational objectives in nonfarm agriculture;
5. To demonstrate and evaluate training programs in pilot centers at the high school level;
6. To develop leadership in vocational education, especially in the service of vocational agriculture.

The research takes into account the great diversity of Louisiana agriculture which offers a wide variety of occupational opportunities involving equally diverse agricultural knowledge and skill and makes necessary a number of different training programs in vocational agriculture. Hence, to gain the key factors required for developing new and more timely training the research was conducted statewide, approximating 100 per cent of the nonfarm agricultural businesses and agencies having workers with agricultural competencies.
The scope of the research attempted required a two-phase approach; first, a survey of nonfarm agricultural businesses and agencies located in the seven metropolitan areas of the state, and second, repeating the survey in the smaller towns and cities of the state.

A grant of $25,000 from the State Board of Liquidation of the State Debt funded Phase One, while a grant of $94,000 from the U. S. Office of Education, 4 (c) funds, funded Phase Two under contract number OE 5-85-040.

Research conducted under Phase One was reported under Agricultural Education Series Numbers 4, 6, 7, 8, 9, 10, 11, and 12, Louisiana State University, Baton Rouge, Louisiana. This report combines Phases One and Two, giving statewide coverage of nonfarm agricultural occupations in Louisiana.

Procedure

Both Phases One and Two of the study were descriptive, using the survey method and the interview technique for obtaining needed information. The selection of metropolitan areas to include in Phase One was effected by general acknowledgment of areas in Louisiana considered to be metropolitan: Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans, and Shreveport.

Some 90 smaller towns and villages -- those within or adjacent to educational centers having vocational agriculture programs -- were covered by Phase Two.

Firms to be surveyed in each area included in the study were determined by state and local Employment Security Divisions, Chambers of Commerce, the Yellow Pages of the telephone directories, and the local agricultural instructor. No concern was overlooked where one or more workers were required to have agricultural competencies in job performance.
For Phase Two the sample of 90 towns and villages included a total of 1,363 businesses and agencies having workers with agricultural knowledge and skill. Total employment amounted to 21,419 workers, with 10,938 using agricultural knowledge and skill in job performance.

The total sample, both Phase One and Two, contained 2,430 nonfarm agricultural concerns having 51,719 workers, with 20,025 required to have knowledge and skill in agricultural subjects. These workers were distributed over a total of 1,699 different job titles, each involving specific knowledge and skills in agricultural subjects.

The survey of agricultural firms located in the metropolitan areas was effected by interviewers employed and trained by University personnel, using facilities and resources supplied by the Division of Employment Security. Two interview schedules were prepared, A and B, for purposes of identifying job titles and needed competencies for job entry. Both schedules* were pretested under actual field conditions -- they are placed in the Appendix. In design, they follow general patterns developed at the National Center in Columbus, Ohio.

Job titles in a particular concern were identified and defined by management, along with the agricultural knowledge and skill required for entry and advancement.

Firms involved were classified according to eight categories, or occupational families:

- Farm Machinery Sales & Service
- Farm Supplies & Equipment
- Livestock & Poultry
- Crops, Forestry & Soil Conservation
- Ornamental Horticulture
- Wildlife & Recreation
- Farm Service
- Agricultural Service

*See Appendix A.
Job titles were classified according to levels of employment:

- Professional
- Technical
- Managerial
- Supervisory
- Sales
- Office
- Skilled
- Semiskilled
- Unskilled

Phase Two, the survey of nonfarm agricultural firms in the 90 smaller towns and villages of the state, was accomplished with the aid of 186 local teachers of vocational agriculture, plus four research associates assigned to the project. Actual surveys were made by these teachers under the supervision of the research associates, who, along with the faculty in Agricultural Education, trained them in the use of the interview technique and the schedules employed.

Training sessions for the teachers were made a major part of an extension course, Agricultural Education 219, a problems course organized for that purpose, which extended over a period of 30 weeks when the surveys were made. Expenses incurred by the participating teachers were paid by the University, using both federal and state funds amounting to a total of $14,588.

State funds were supplied by the Vocational Division of the State Department of Education to augment federal funds provided for the Project Number OE 5-85-040.

Information gathered in Phase Two was treated in the same manner as in Phase One.
Treatment of Survey Information

Information obtained from 1,067 concerns surveyed in the metropolitan centers was combined with that obtained from 1,363 firms in the semi-urban and rural areas for a total of 2,430. Data were organized and presented under three general categories: (1) occupational families, (2) classification of job titles into levels of employment and training required in agricultural subjects, and (3) special requirements for job entry.

Descriptive statistical techniques were used in analyzing data. Simple frequency tabulations were employed to show job titles, levels of employment, educational levels associated with job entry, preferred residential background, farm experience and continuing education required for job advancement. Employee ages were presented by occupational family and level of employment in terms of average age of all workers, average minimum age for job entry, and average maximum age for entry. Salaries were reported according to medians by levels of employment in the various families.

Agricultural subject matter in which employees must be trained was indicated for each occupational family by employment level. Subject matter areas selected to show basic agricultural training required were: (1) Animal Science, (2) Plant Science, (3) Agricultural Business Management and Marketing, and (4) Agricultural Mechanics and Automation. At the time each employer interviewed furnished the information about numbers of present and future employees in each job title in the business. A checklist of competencies (knowledge, skills and abilities) was completed separately for all job titles. For every item on the checklist
the employer marked the degree of competency required of employees. Average competency ratings for employees were then computed according to levels of employment. Components of each subject matter area designed to determine specialized training needs was not treated in this report but will appear in a subsequent release.

Data obtained from the 2,430 businesses and agencies surveyed were grouped according to selected occupational families: (1) Farm Machinery Sales and Service, (2) Farm Supplies and Equipment, (3) Livestock and Poultry, (4) Crops, Forestry and Soil Conservation, (5) Ornamental Horticulture, (6) Wildlife and Recreation, (7) Farm Service, and (8) Agricultural Service.

Job titles identified were classified into occupational levels, taking into consideration duties and responsibilities as well as field of activity: (1) Professional, (2) Technical, (3) Managerial, (4) Supervisory, (5) Sales, (6) Office, (7) Skilled, (8) Semiskilled, and (9) Unskilled.

Data were analyzed in the Computer Center of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, Louisiana.*

*See Appendix B
PRESENTATION AND ANALYSIS OF SURVEY INFORMATION

The principal purpose of the study was to identify clusters of agricultural jobs found in agriculturally oriented businesses and agencies located in metropolitan, semi-urban, and rural areas of Louisiana, with particular emphasis on educational qualifications needed by prospective employees to effect satisfactory job entry. This analysis was made in an attempt to provide those engaged in education with a knowledge of present and emerging agricultural opportunities other than farming or ranching, which may be used for purposes of building curriculums in the public schools.

Occupational Families

Groupings, appropriate to the nature of product processed or service performed, were developed as a means of classifying agricultural businesses, industries and agencies. These clusters were called occupational families. Each one offered a wide range of occupations, according to variations in concerns making up the several families. Specific jobs contained within a family grouping may require similar yet different skills and abilities, depending upon the level of performance and the work to be done.

The 2,430 agricultural businesses and agencies were categorized in eight major occupational families. Identity of the individual concern was lost in classification. Types of firms, industries or agencies were shown under each family according to the following arrangement:

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<th>Farm Machinery Sales &amp; Service (cont.)</th>
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<tr>
<td>Automation Equipment Co.</td>
<td>Farm Implement Co.</td>
</tr>
<tr>
<td>Farm Machinery &amp; Equipment Dealer</td>
<td>Cotton Picker Rebuilding Co.</td>
</tr>
<tr>
<td>Automobile Dealer</td>
<td>Farm Implement Manufacturer</td>
</tr>
<tr>
<td>Contractors Equipment Co.</td>
<td>Farm Equipment Prefabricator</td>
</tr>
</tbody>
</table>
Types of Firms, Industries and Agencies (continued)

**Farmland Supplies & Equipment**
- Hardware Store
- Fence Co.
- Department Store
- Feed & Seed Store
- Louisiana Agricultural Cooperatives
- Building Supply Store
- Dime Store
- Fertilizer Co.
- Wholesale Distributing Co.
- Agricultural Chemical Dealer
  - Garden Center
  - Veterinarian Supply Co.
- Dairy Farm Equipment Dealer
- Farmers Co-op.
- Lumber Co.
- Marketing Co-op.
- Rice & Feed Mill
- Auto Supply Co.
- Motor Supply
- Blowpipe Co.
- Gin and Mill Supply Co.
- Butane Co.
- Spray & Equipment Co.
- Farm Store
- General Merchandise Co.
- Seed Co.
- Farm Supply
- Tire Service Co.
- Drug Store (Veterinarian Supplies)
- Forestry Equipment Dealer

**Livestock & Poultry**
- Slaughter House
- Butcher Shop
- Meat Market
- Egg Processing Co.
- Milk Distributorship
- Creamery
- Wholesale Meat Distributor
- Dairy Products Co.
- Boarding Stables
- Livestock Auction Barn
- Rendering Plant
- Poultry Market
- Packing Plant
- Soap Co.
- Hatchery
- Grocery Store
- Poultry & Egg Processing Co.

**Livestock & Poultry (cont.)**
- Poultry By-Products Co.
- Stockyard
- Frozen Food Locker
- Sausage Co.
- Louisiana State Milk Testing Div.
- Cattle Dealer Company
- Hide Company.

**Crops, Forestry & Soil Conservation**
- Louisiana Forestry Commission
- Fruit Exchange Co.
- Tree Service Co
- Logging Co.
- Produce Co.
- Rice By-Products Co.
- Coffee Co.
- Fruit Co.
- U.S. Forest Service
- Rice Mill
- Wood Preserving Co.
- Grain Co.
- Canned Food Co.
- Lumber Co. (sawmill)
- Tomato Co.
- Rice Dryer
- Timber Contractor
- Seed Dealer
- Cotton Warehouse
- Wood Yards
- Sugar Refinery
- Compress & Warehouse Co.
- Seed Cleaning Plant
- Syrup Mill
- Sweet Potato Co.
- Tree Nursery
- Veneer Company
- Stake Mill
- Craft Shop
- Fruit & Vegetable Market
- Feed Mill
- Oil Mill
- Pulpwood Co.
- Food Store
- Cotton Gin
- Cotton Brokerage Co.
- Paper Co.
- Planting Co.
- Sugar Co-op.
- Cotton Products Co
- Creosoting Co.
Types of Firms, Industries and Agencies (continued)

Crops, Forestry & Soil Conservation (cont.)

Fruit Stand
Cotton Division, Marketing Service
Forestry Consultant Co.
Irrigation Company
Plywood Mill

Ornamental Horticulture
Garden Center
Nursery
Florist
Landscape Co.
Wholesale Florist
Horticulture Products Co.
Florist Gift Shop
Greenhouse

Wildlife & Recreation
Golf Course
State Park
Riding Stable
Taxidermist
S.P.C.A.
City Park
National Park
Playground
Golf Course Service Co.
La. Wildlife & Fisheries Com.
State Park & Recreation Com.

Farm Service (continued)

Insurance Co.
Farm Service Laboratory
Airplane Service
Hay Harvesting Co.
School Canning Center
Small Motor Shop
Sheet Metal
Creosoting Co.
Seeding and Sodding Co.
Saw Repairing Co.
Dragline & Bulldozer Service
Cabinet Shop
Concrete Co.
Plumbing & Heating
Canal Company
Farm Service Laboratory
Land & Timber Company
Fertilizer & Lime Service
Motor Repair Shop
D.H.I.A. Supervisor
Farm Dusting Co.
Iron Works
Land & Oil Co.
Blacksmith
Farm Bureau
Farm Tractor Service

Agricultural Service

Animal Hospital
Veterinarian
Agricultural Stabilization & Conservation
State College
Agricultural Extension Service
State Dept. of Agriculture
Vocational Agriculture Teacher
State Market Commission
State Dept. of Education
Animal Disease Eradication (USDA)
Bank
State Land Office
Levee Board
Forestry Experiment Station
Plant Pest Control (USDA)
Federal Land Bank Association
U.S. Air Force Base
State Fair Association
Experiment Station
U.S. Dept. of Interior.
Number of Nonfarm Agricultural Concerns

This report combined data from 2,430 concerns. The study of seven metropolitan centers covered 1,067 establishments engaged in some type of agricultural business, while the 90 semi-urban and rural areas contained 1,363 agricultural concerns.

### TABLE I

**NUMBER OF AGRICULTURAL BUSINESSES, INDUSTRIES, AND AGENCIES GROUPED BY OCCUPATIONAL FAMILY, 1965 AND 1966**

<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>State Metropolitan Summary</th>
<th>Area I</th>
<th>Area II</th>
<th>Area III</th>
<th>Area IV</th>
<th>Total State</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Machinery</td>
<td></td>
<td>38</td>
<td>26</td>
<td>35</td>
<td>53</td>
<td>24</td>
<td>176</td>
</tr>
<tr>
<td>Sales &amp; Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td></td>
<td>251</td>
<td>60</td>
<td>94</td>
<td>88</td>
<td>58</td>
<td>551</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td></td>
<td>162</td>
<td>38</td>
<td>49</td>
<td>62</td>
<td>40</td>
<td>351</td>
</tr>
<tr>
<td>Crops, Forestry &amp; Soil Conservation</td>
<td></td>
<td>152</td>
<td>48</td>
<td>98</td>
<td>78</td>
<td>18</td>
<td>394</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td></td>
<td>111</td>
<td>6</td>
<td>11</td>
<td>21</td>
<td>11</td>
<td>160</td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td></td>
<td>29</td>
<td>2</td>
<td>12</td>
<td>3</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Farm Service</td>
<td></td>
<td>178</td>
<td>31</td>
<td>87</td>
<td>52</td>
<td>25</td>
<td>373</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td></td>
<td>146</td>
<td>22</td>
<td>94</td>
<td>86</td>
<td>31</td>
<td>379</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>1,067</td>
<td>233</td>
<td>480</td>
<td>443</td>
<td>207</td>
<td>2,430</td>
</tr>
</tbody>
</table>

A trend evident throughout the nation was apparent in Louisiana in that a concentration of businesses were engaged in servicing production agriculture. The importance of service concerns in Louisiana becomes apparent when Table I is analyzed. Farm Supplies and Equipment, Agricultural Service, Farm Service, and Farm Machinery Sales and Service made up 60.9 per cent of the total number of businesses.
Actual processing of farm products into consumable commodities was limited largely to two families: Livestock and Poultry; Crops, Forestry and Soil Conservation. However, these fields also contain a large variety of occupations and specific jobs relating to the servicing of farmer needs.

Agricultural establishments were well distributed over the state with the exception of those under Agricultural Services. In this area a concentration in the metropolitan centers, largely in the form of state and federal agencies, was noted. An interesting observation centered around a heavy population of Farm Machinery Sales and Services in the southwest region of the state. The dimensions of agriculture in this section, led by the vast operations of the rice and sugar cane industries, accounted for this concentration.

The rank of occupational families according to number of establishments was as follows:

- Farm Supplies & Equipment
- Crops, Forestry & Soil Conservation
- Agricultural Service
- Farm Service
- Livestock & Poultry
- Farm Machinery Sales & Service
- Ornamental Horticulture
- Wildlife & Recreation

Special interest centered around the number of firms engaged in Ornamental Horticulture. The development of this phase of nonfarm agriculture was indicative of urbanization and increasing occupational opportunities provided in this area of service. Ornamental Horticulture businesses were concentrated in the metropolitan centers.

The development shown by concerns and agencies engaged in Wildlife and Recreation was equally significant. This growth includes public parks, golf courses, and wildlife conservation agencies at the state and federal
levels. It is of special interest to farmers and landowners with land available for diversion into recreational tracts.

**Number Employed in Nonfarm Agriculture**

A total of 51,719 employees was found in the 2,430 agriculturally oriented businesses and agencies participating in the survey. Of this number 20,025, or 38.7 per cent, were required to have competencies in agriculture as a job requirement, with an expected increase to 21,999 in the next five years -- an overall rise of 9.8 per cent.

Data in Table II, indicating total employment in nonfarm agricultural firms, not only pointed up the economic importance of agriculture in Louisiana, but identified occupational possibilities other than farming where a general knowledge of agriculture was a requirement for job entry.

Occupational families, when ranked according to number of workers appeared as follows:

- Crops, Forestry & Soil Conservation
- Farm Supplies & Equipment
- Livestock & Poultry
- Agricultural Service
- Farm Service
- Farm Machinery Sales & Service
- Wildlife & Recreation
- Ornamental Horticulture

Generalizations drawn from data presented in Table II are listed below:

1. Since this survey was statewide, including metropolitan centers as well as semi-urban and rural areas, the need for agricultural training and skill may have been minimized in certain cases. Of the total 51,719 workers it was found that 20,025, or 38.7 per cent, needed to have knowledge and skill in agriculture to contribute positively toward their occupation. On the basis studies completed in other states this percentage is low.
<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Total Number of Employees</th>
<th>Current Employment</th>
<th>Per Cent Current Employees Needing Agri. Competencies</th>
<th>Expected Employment Five Years Hence</th>
<th>Per Cent Increase Five Years Hence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Machinery Sales &amp; Service</td>
<td>3,038</td>
<td>1,828</td>
<td>60.1</td>
<td>2,248</td>
<td>22.9</td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td>8,360</td>
<td>3,022</td>
<td>36.1</td>
<td>3,383</td>
<td>11.9</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td>8,298</td>
<td>3,194</td>
<td>38.4</td>
<td>3,398</td>
<td>6.3</td>
</tr>
<tr>
<td>Crops, Forestry &amp; Soil Conservation</td>
<td>17,040</td>
<td>6,061</td>
<td>35.5</td>
<td>6,390</td>
<td>5.4</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>1,076</td>
<td>928</td>
<td>86.2</td>
<td>1,049</td>
<td>13.0</td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td>1,641</td>
<td>373</td>
<td>22.7</td>
<td>437</td>
<td>17.1</td>
</tr>
<tr>
<td>Farm Service</td>
<td>5,631</td>
<td>1,844</td>
<td>32.7</td>
<td>2,082</td>
<td>12.9</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>6,635</td>
<td>2,775</td>
<td>41.8</td>
<td>3,012</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>51,719</td>
<td>20,025</td>
<td>38.7</td>
<td>21,999</td>
<td>9.8</td>
</tr>
</tbody>
</table>
2. Even though Ornamental Horticulture ranked eighth among the occupational families in total number of workers, it was highest in percentage of workers (86.2) needing knowledge and skill in agricultural subjects in order to perform job requirements. This reflects the rapid development of the horticulture industry and the demand for trained workers to meet the mushrooming needs of persons in the large cities for professional advice and assistance in their landscaping problems.

3. Farm Machinery Sales and Service, while ranking sixth among the occupational families, was second in number of workers needing agricultural competencies. These data indicated the rapid growth of the agricultural machinery business and the extent of mechanization in production agriculture.

4. All eight of the occupational families were expected to grow in number of employees trained in agricultural subjects. Projected growth in employees during the coming five-year period ranged from a low of 5.4 per cent in Crops, Forestry and Soil Conservation, to a high of 22.9 per cent in Farm Machinery Sales and Service. The overall anticipated increase was 9.8 per cent.

A ranking of occupational families, according to numbers of workers needing agricultural competencies, was as follows:

Crops, Forestry & Soil Conservation
Livestock & Poultry
Farm Supplies & Supplies
Agricultural Service
Farm Service
Farm Machinery Sales & Service
Ornamental Horticulture
Wildlife & Recreation

Job Titles According To Occupational Families of Employment

The 20,025 workers serving in an agricultural capacity in the 2,340 establishments surveyed held 1,699 job titles, ranging in performance from the level of laborer to professional status.

In this study, a job title refers to a specific position held by a worker, or number of workers, who must have for satisfactory performance a knowledge and skill in agriculture of a particular nature.
<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Number of Job Titles</th>
<th>Number of Job Titles</th>
<th>Per Cent Job Title Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Total</td>
</tr>
<tr>
<td>Farm Machinery Sales &amp; Service</td>
<td>41</td>
<td>70</td>
<td>111</td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td>129</td>
<td>118</td>
<td>247</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td>169</td>
<td>78</td>
<td>247</td>
</tr>
<tr>
<td>Crops Forestry &amp; Soil Conservation</td>
<td>223</td>
<td>231</td>
<td>454</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>66</td>
<td>10</td>
<td>76</td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td>40</td>
<td>25</td>
<td>65</td>
</tr>
<tr>
<td>Farm Service</td>
<td>124</td>
<td>94</td>
<td>218</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>206</td>
<td>75</td>
<td>281</td>
</tr>
<tr>
<td>Total</td>
<td>998</td>
<td>701</td>
<td>1,699</td>
</tr>
</tbody>
</table>
A detailed breakdown of job titles was shown for each of the occupational families, together with the number of workers in each job title.*

Crops, Forestry and Soil Conservation contained the largest number of job titles as well as the largest number of workers using a knowledge and skill in agricultural subjects. A ranking of families according to number of job titles appears below:

- Crops, Forestry & Soil Conservation
- Agricultural Service
- Farm Supplies & Equipment
- Livestock and Poultry
- Farm Service
- Farm Machinery Sales & Service
- Ornamental Horticulture
- Wildlife & Recreation

All of the families were expected to grow, adding 163 job titles over the coming five-year period. The anticipated increase in number of job titles implies additional occupational opportunities for youth in an expanding agricultural complex.

Each of the occupational families provided job titles in sufficient numbers to challenge the occupational interests of youth who indicate a desire to enter a nonfarm agricultural occupation. The growth trend indicated will make nonfarm agriculture in the state even more appealing to young people, particularly those with a rural background.

Levels of Employment by Occupational Family

Available job titles at the different levels of employment within an occupational family were closely related to the occupational opportunities available to young people in nonfarm agriculture. Level of employment was indicative of salary or wages that can be expected and formal education

*See Appendix C.*
required, while the job title indicated lines of applied training to be
given consideration.

Table IV indicates these levels of employment found within the
eight occupational families.

Employees at the professional level were concentrated in the
Agricultural Service, and Crops, Forestry and Soil Conservation families. These families required a large proportion of college graduates trained in agriculture.

Employees at the technical level were found primarily in Agri-cultural Service; Crops, Forestry and Soil Conservation; Farm Service, and Livestock and Poultry. The need for technicians is relatively recent, and opens new fields of opportunity for youth.

Managerial and supervisory levels shared the spotlight of impor-
tance as illustrated by the numbers serving in these capacities in the firms surveyed. Employees at these levels were well distributed in all the concerns and emphasized the need for workers whose training must cover a broad area in agriculture as well as business practices and principles.

All firms participating in the study employed salesmen who were required to have knowledge and skill in agriculture. The importance of salesmen to the agriculturally oriented business was illustrated by the large number employed in some of the families. In these families the growth and development of many of the businesses depend upon the ability of their salesmen. Sales personnel made up 9.7 per cent of the total workers having agricultural training.

An unexpected development was the large number of office person-
nel designated by employers as needing certain skills in agriculture. This level of employment made up 7.2 per cent of the total.
<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Levels of Employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prof.</td>
<td>Tech.</td>
</tr>
<tr>
<td>Farm Machinery Sales &amp; Service</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td>3</td>
<td>113</td>
</tr>
<tr>
<td>Crops, Forestry &amp; Soil Conservation</td>
<td>363</td>
<td>169</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Farm Service</td>
<td>64</td>
<td>164</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>793</td>
<td>820</td>
</tr>
<tr>
<td>Total</td>
<td>1,316</td>
<td>1,286</td>
</tr>
<tr>
<td>Per Cent</td>
<td>6.6</td>
<td>6.4</td>
</tr>
</tbody>
</table>
A total of 7,312 workers, or 36.6 per cent, was classified as skilled and semiskilled. Employers interviewed indicated that these workers were very important to the operation of the business and were usually required to have knowledge and skill in agricultural subjects in specialized areas. Unskilled level employees (13 per cent) were reported as needing agricultural skills, but usually on a limited scale.

Eliminating the unskilled, a ranking of occupational levels by number of workers gives a very clear picture of occupational opportunities offered at each level:

- Semiskilled
- Managerial
- Skilled
- Sales
- Office
- Professional
- Technical
- Supervisory

Professional personnel employed in the state universities and colleges were not included in this study. Inclusion of these employees would have moved the professional level to a higher rank inasmuch as Louisiana State University alone has a staff of over 800 professional agriculturalists. The number of technicians would also have increased.

Job Entry Age Into Nonfarm Agricultural Occupations

The mean age for all employees was computed by occupational family and for each level of employment. Consideration was given to the present age, minimum age for job entry, and the maximum age for entry.

Table V shows averages of ages for all levels of employment. Subsequently Tables VI-1 through VI-8 present the same information by occupational families and level of employment.
TABLE V

AVERAGE PRESENT, AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY LEVEL OF EMPLOYMENT

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>34</td>
<td>24</td>
<td>47</td>
</tr>
<tr>
<td>Technical</td>
<td>37</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>Managerial</td>
<td>39</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Supervisory</td>
<td>38</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Sales</td>
<td>36</td>
<td>23</td>
<td>49</td>
</tr>
<tr>
<td>Office</td>
<td>34</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>Skilled</td>
<td>34</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>33</td>
<td>21</td>
<td>48</td>
</tr>
<tr>
<td>Unskilled</td>
<td>34</td>
<td>21</td>
<td>48</td>
</tr>
</tbody>
</table>

The average age of all employees required to have agricultural competencies varied little among the families and the different levels of employment. Ages of employees ranged from 33-39, with 34 years representing the average age.

Minimum employment entry age ranged from 21 to 26, giving an average for all levels of employment of approximately 23 years. The lack of younger people in some of the categories was attributed to a qualifications deficit, with compulsory military service also contributing to the shortage.
### TABLE VI-1

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

**FARM MACHINERY SALES AND SERVICE**

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>31</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Technical</td>
<td>38</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Managerial</td>
<td>37</td>
<td>27</td>
<td>48</td>
</tr>
<tr>
<td>Supervisory</td>
<td>38</td>
<td>28</td>
<td>47</td>
</tr>
<tr>
<td>Sales</td>
<td>36</td>
<td>23</td>
<td>49</td>
</tr>
<tr>
<td>Office</td>
<td>33</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>Skilled</td>
<td>35</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>31</td>
<td>21</td>
<td>44</td>
</tr>
<tr>
<td>Unskilled</td>
<td>38</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
</table>

### TABLE VI-2

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

**FARM SUPPLIES AND EQUIPMENT**

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>36</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
<td>Technical</td>
<td>39</td>
<td>27</td>
<td>53</td>
</tr>
<tr>
<td>Managerial</td>
<td>39</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Supervisory</td>
<td>36</td>
<td>26</td>
<td>48</td>
</tr>
<tr>
<td>Sales</td>
<td>35</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>Office</td>
<td>34</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>Skilled</td>
<td>35</td>
<td>22</td>
<td>46</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>32</td>
<td>21</td>
<td>47</td>
</tr>
<tr>
<td>Unskilled</td>
<td>37</td>
<td>20</td>
<td>47</td>
</tr>
</tbody>
</table>
TABLE VI-3
AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>30</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Technical</td>
<td>36</td>
<td>23</td>
<td>51</td>
</tr>
<tr>
<td>Managerial</td>
<td>37</td>
<td>26</td>
<td>48</td>
</tr>
<tr>
<td>Supervisory</td>
<td>35</td>
<td>24</td>
<td>49</td>
</tr>
<tr>
<td>Sales</td>
<td>34</td>
<td>22</td>
<td>51</td>
</tr>
<tr>
<td>Office</td>
<td>35</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>Skilled</td>
<td>34</td>
<td>21</td>
<td>48</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>32</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>Unskilled</td>
<td>31</td>
<td>25</td>
<td>46</td>
</tr>
</tbody>
</table>

TABLE VI-4
AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>35</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Technical</td>
<td>36</td>
<td>25</td>
<td>49</td>
</tr>
<tr>
<td>Managerial</td>
<td>39</td>
<td>27</td>
<td>50</td>
</tr>
<tr>
<td>Supervisory</td>
<td>40</td>
<td>28</td>
<td>51</td>
</tr>
<tr>
<td>Sales</td>
<td>39</td>
<td>25</td>
<td>48</td>
</tr>
<tr>
<td>Office</td>
<td>35</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>Skilled</td>
<td>38</td>
<td>25</td>
<td>51</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>37</td>
<td>21</td>
<td>47</td>
</tr>
<tr>
<td>Unskilled</td>
<td>37</td>
<td>22</td>
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27
### TABLE VI-5

**AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT**

**ORNAMENTAL HORTICULTURE**

<table>
<thead>
<tr>
<th>Level of Employment</th>
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<th>Maximum</th>
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<td>Managerial</td>
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<td>26</td>
<td>50</td>
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<tr>
<td>Supervisory</td>
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<td>25</td>
<td>50</td>
</tr>
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<td>Sales</td>
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<td>48</td>
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<tr>
<td>Office</td>
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<td>Semiskilled</td>
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<td>20</td>
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<tr>
<td>Unskilled</td>
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<td>48</td>
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### TABLE VI-6

**AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT**

**WILDLIFE AND RECREATION**

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
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<th>Maximum</th>
</tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>Managerial</td>
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<td>24</td>
<td>53</td>
</tr>
<tr>
<td>Supervisory</td>
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<td>24</td>
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<tr>
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<td>38</td>
<td>22</td>
<td>53</td>
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</tbody>
</table>
TABLE VI-7

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

FARM SERVICE

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
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<tr>
<td>Managerial</td>
<td>39</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Supervisory</td>
<td>39</td>
<td>20</td>
<td>47</td>
</tr>
<tr>
<td>Sales</td>
<td>38</td>
<td>22</td>
<td>50</td>
</tr>
<tr>
<td>Office</td>
<td>36</td>
<td>22</td>
<td>50</td>
</tr>
<tr>
<td>Skilled</td>
<td>34</td>
<td>23</td>
<td>47</td>
</tr>
<tr>
<td>Semiskilled</td>
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</tr>
<tr>
<td>Unskilled</td>
<td>32</td>
<td>20</td>
<td>46</td>
</tr>
</tbody>
</table>

TABLE VI-8

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Present</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>37</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>Technical</td>
<td>38</td>
<td>22</td>
<td>49</td>
</tr>
<tr>
<td>Managerial</td>
<td>41</td>
<td>28</td>
<td>52</td>
</tr>
<tr>
<td>Supervisory</td>
<td>39</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Sales</td>
<td>36</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>Office</td>
<td>36</td>
<td>22</td>
<td>50</td>
</tr>
<tr>
<td>Skilled</td>
<td>32</td>
<td>20</td>
<td>48</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>36</td>
<td>21</td>
<td>49</td>
</tr>
<tr>
<td>Unskilled</td>
<td>30</td>
<td>21</td>
<td>42</td>
</tr>
</tbody>
</table>
Most employers indicated that younger people with the necessary education and training would be acceptable. An analysis of the maximum job entry age showed employers were of the opinion that the firm should be able to realize 15 to 20 years service from an employee prior to retirement. The average maximum entry age for all levels was approximately 40 years.

A review of the mean ages for all families revealed that the differences in ages were not significant. All families and all levels of employment contained an agricultural working force averaging about 34 years. The average minimum entry age was 23, with 48 being maximum.

**Monthly Salaries or Wages In Occupations Other Than Farming**

Data gathered by the study indicated that as a matter of general procedure, employees were paid in accordance with their background of training and responsibilities, as well as their tenure with a particular organization.

A factor influencing average salaries in at least four families -- Crops, Forestry and Soil Conservation; Ornamental Horticulture; Wildlife and Recreation, and Livestock and Poultry -- was the large number of semiskilled and unskilled workers. This group of employees can never hope to achieve a salary, even after years of tenure, to match the beginning salaries of the other levels of employment.

The occupational families varied in salary scales for the several levels, yet generally professional and managerial levels were at the top of the scale with unskilled at the bottom.

As noted in Table IV, 35 per cent of the total agricultural workers were found in the semiskilled and unskilled levels of employment. These
levels require lesser amounts of education and training, did not offer satisfactory beginning pay, and had definite limitations for pay increases following tenure. At the same time four levels of employment -- professional, technical, managerial, and supervisory -- accounted for 33.5 per cent of the agricultural workers. It seems significant that these four categories headed the list in terms of starting and maximum salaries. These data have definite implications for designing programs in terms of future job demands.

TABLE VII

AVERAGE MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY LEVEL OF EMPLOYMENT

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Beginning</th>
<th>Present</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>$441.95</td>
<td>$582.44</td>
<td>$682.01</td>
</tr>
<tr>
<td>Technical</td>
<td>369.34</td>
<td>446.57</td>
<td>532.40</td>
</tr>
<tr>
<td>Managerial</td>
<td>385.65</td>
<td>494.65</td>
<td>605.31</td>
</tr>
<tr>
<td>Supervisory</td>
<td>369.60</td>
<td>460.78</td>
<td>512.85</td>
</tr>
<tr>
<td>Sales</td>
<td>295.69</td>
<td>394.04</td>
<td>489.07</td>
</tr>
<tr>
<td>Office</td>
<td>271.10</td>
<td>333.74</td>
<td>385.34</td>
</tr>
<tr>
<td>Skilled</td>
<td>283.65</td>
<td>345.21</td>
<td>406.10</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>217.60</td>
<td>266.10</td>
<td>307.79</td>
</tr>
<tr>
<td>Unskilled</td>
<td>190.65</td>
<td>218.30</td>
<td>244.87</td>
</tr>
</tbody>
</table>

These data indicate that 24.5 per cent of the employees in firms surveyed performed jobs classified in the sales and skilled employment levels. Salaries in these levels were below those reported for the technical and supervisory workers. However, starting salaries for this group were good and there were indications of possibilities for salary advancement as the individual gained experience and tenure. This seemed to offer incentive for young workers who meet the qualifications outlined by employers.
TABLE VIII-1

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Median Monthly Salary</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
<td>Present</td>
<td>Maximum</td>
</tr>
<tr>
<td>Professional</td>
<td>$601.00</td>
<td>$676.00</td>
<td>$723.72</td>
</tr>
<tr>
<td>Technical</td>
<td>276.00</td>
<td>426.00</td>
<td>576.00</td>
</tr>
<tr>
<td>Managerial</td>
<td>424.07</td>
<td>542.66</td>
<td>651.00</td>
</tr>
<tr>
<td>Supervisory</td>
<td>381.55</td>
<td>438.50</td>
<td>506.00</td>
</tr>
<tr>
<td>Sales</td>
<td>333.50</td>
<td>463.50</td>
<td>613.50</td>
</tr>
<tr>
<td>Office</td>
<td>239.46</td>
<td>312.90</td>
<td>383.14</td>
</tr>
<tr>
<td>Skilled</td>
<td>282.87</td>
<td>371.75</td>
<td>450.33</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>223.32</td>
<td>265.70</td>
<td>296.00</td>
</tr>
<tr>
<td>Unskilled</td>
<td>183.33</td>
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<td>200.00</td>
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</tbody>
</table>

TABLE VIII-2

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

<table>
<thead>
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<th>Level of Employment</th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
<td>Present</td>
<td>Maximum</td>
</tr>
<tr>
<td>Professional</td>
<td>$426.00</td>
<td>$501.00</td>
<td>$626.00</td>
</tr>
<tr>
<td>Technical</td>
<td>526.00</td>
<td>576.00</td>
<td>626.00</td>
</tr>
<tr>
<td>Managerial</td>
<td>362.00</td>
<td>479.00</td>
<td>570.00</td>
</tr>
<tr>
<td>Supervisory</td>
<td>348.00</td>
<td>430.00</td>
<td>496.00</td>
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<tr>
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<td>250.00</td>
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<td>397.00</td>
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<tr>
<td>Office</td>
<td>230.00</td>
<td>294.00</td>
<td>355.00</td>
</tr>
<tr>
<td>Skilled</td>
<td>275.00</td>
<td>336.00</td>
<td>390.00</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>236.00</td>
<td>286.00</td>
<td>326.00</td>
</tr>
<tr>
<td>Unskilled</td>
<td>193.00</td>
<td>220.00</td>
<td>248.00</td>
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TABLE VIII-3
MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

<table>
<thead>
<tr>
<th>Level of Employment</th>
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<th>Beginning</th>
<th>Present</th>
<th>Maximum</th>
</tr>
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<tbody>
<tr>
<td>Professional</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>$386.00</td>
<td>$463.50</td>
<td>$532.25</td>
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<tr>
<td>Managerial</td>
<td>355.41</td>
<td>455.54</td>
<td>601.00</td>
<td></td>
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<tr>
<td>Supervisory</td>
<td>379.12</td>
<td>446.83</td>
<td>519.75</td>
<td></td>
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<tr>
<td>Sales</td>
<td>262.54</td>
<td>344.75</td>
<td>396.00</td>
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<td>244.93</td>
<td>285.88</td>
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</tr>
<tr>
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<td>187.50</td>
<td>226.00</td>
<td></td>
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TABLE VIII-4
MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Median Monthly Salary</th>
<th>Beginning</th>
<th>Present</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
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<tr>
<td>Technical</td>
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<td>485.37</td>
<td>560.37</td>
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<tr>
<td>Managerial</td>
<td>423.58</td>
<td>461.00</td>
<td>594.10</td>
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<tr>
<td>Supervisory</td>
<td>415.29</td>
<td>480.41</td>
<td>534.33</td>
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</tr>
<tr>
<td>Sales</td>
<td>371.83</td>
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<td>538.50</td>
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<td>276.96</td>
<td>333.95</td>
<td>380.76</td>
<td></td>
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<tr>
<td>Skilled</td>
<td>305.74</td>
<td>362.98</td>
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<td>291.79</td>
<td>351.31</td>
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</tr>
<tr>
<td>Unskilled</td>
<td>194.08</td>
<td>234.57</td>
<td>263.50</td>
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</table>
### TABLE VIII-5

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

**ORNAMENTAL HORTICULTURE**

<table>
<thead>
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<th>Median Monthly Salary</th>
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</thead>
<tbody>
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<td>Beginning</td>
</tr>
<tr>
<td>Professional</td>
<td>$326.00</td>
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<tr>
<td>Technical</td>
<td>175.00</td>
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<td>Managerial</td>
<td>366.00</td>
</tr>
<tr>
<td>Supervisory</td>
<td>301.00</td>
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<tr>
<td>Sales</td>
<td>180.00</td>
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<tr>
<td>Office</td>
<td>276.00</td>
</tr>
<tr>
<td>Skilled</td>
<td>180.00</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>178.00</td>
</tr>
<tr>
<td>Unskilled</td>
<td>184.00</td>
</tr>
</tbody>
</table>

### TABLE VIII-6

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

**WILDLIFE AND RECREATION**

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Median Monthly Salary</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Beginning</td>
</tr>
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<td>Professional</td>
<td>$438.50</td>
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<td>Technical</td>
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</tr>
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<td>Managerial</td>
<td>238.50</td>
</tr>
<tr>
<td>Supervisory</td>
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</tr>
<tr>
<td>Sales</td>
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<tr>
<td>Office</td>
<td>376.00</td>
</tr>
<tr>
<td>Skilled</td>
<td>401.00</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>226.00</td>
</tr>
<tr>
<td>Unskilled</td>
<td>200.00</td>
</tr>
</tbody>
</table>
TABLE VIII-7
MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SERVICE

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Median Monthly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
</tr>
<tr>
<td>Professional</td>
<td>$463.50</td>
</tr>
<tr>
<td>Technical</td>
<td>476.00</td>
</tr>
<tr>
<td>Managerial</td>
<td>432.94</td>
</tr>
<tr>
<td>Supervisory</td>
<td>414.88</td>
</tr>
<tr>
<td>Sales</td>
<td>296.00</td>
</tr>
<tr>
<td>Office</td>
<td>276.66</td>
</tr>
<tr>
<td>Skilled</td>
<td>280.16</td>
</tr>
<tr>
<td>Supervisory</td>
<td>231.00</td>
</tr>
<tr>
<td>Unskilled</td>
<td>200.00</td>
</tr>
</tbody>
</table>

TABLE VIII-8
MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Median Monthly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
</tr>
<tr>
<td>Professional</td>
<td>$480.20</td>
</tr>
<tr>
<td>Technical</td>
<td>341.91</td>
</tr>
<tr>
<td>Managerial</td>
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</tr>
<tr>
<td>Supervisory</td>
<td>428.50</td>
</tr>
<tr>
<td>Sales</td>
<td>376.00</td>
</tr>
<tr>
<td>Office</td>
<td>290.02</td>
</tr>
<tr>
<td>Skilled</td>
<td>291.91</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>200.00</td>
</tr>
<tr>
<td>Unskilled</td>
<td>183.33</td>
</tr>
</tbody>
</table>
Educational Level Desired of Workers in Nonfarm Agriculture

Data indicate that education and occupational training held a priority rating in all aspects of nonfarm agriculture. Table IX gives educational level desired of workers entering nonfarm agricultural jobs, and clearly shows the emphasis placed on formal education.

An analysis of these data confirm the general belief that students planning careers in nonfarm agriculture are expected to complete high school. Only 10.6 per cent of the jobs were available to individuals not holding high school diplomas.

Emphasis placed upon college training was of special significance; 3,069, or 15.3 per cent, of the employees were listed by the employers as needing a college degree to make job entry. An additional 2,180 or 10.9 per cent, had to show some college work before they met employment qualifications. This trend was especially evident in the Agricultural Service family where 1,232 of the 2,775 employees must have college diplomas. If all university and college agricultural personnel were added, the percentage of nonfarm agricultural workers in this family would have increased sharply, making the need for college trained personnel take on added significance. It is estimated that more than 800 agricultural workers are employed in the state institutions having agricultural programs.

Employer concern over the lack of qualified youth applying for jobs in their organizations was indicated by insistence upon formal education for practically all of their future employees. Of special significance was the often expressed idea of the need for prevocational training leading to job entry.
<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Number of Employees</th>
<th>Less Than High School</th>
<th>High School Graduate</th>
<th>Post H. S. Tech. Educ.</th>
<th>Some College</th>
<th>College Degree</th>
<th>No Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per No.</td>
<td>Per Cent</td>
<td>Per No.</td>
<td>Per Cent</td>
<td>Per No.</td>
<td>Per Cent</td>
</tr>
<tr>
<td>Farm Machinery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales &amp; Service</td>
<td>1,828</td>
<td>73</td>
<td>4.0</td>
<td>925</td>
<td>50.6</td>
<td>314</td>
<td>17.2</td>
</tr>
<tr>
<td>Farm Supplies</td>
<td>3,022</td>
<td>261</td>
<td>9.6</td>
<td>1,749</td>
<td>57.9</td>
<td>183</td>
<td>6.6</td>
</tr>
<tr>
<td>&amp; Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock &amp;</td>
<td>3,194</td>
<td>509</td>
<td>15.9</td>
<td>1,692</td>
<td>53.0</td>
<td>164</td>
<td>5.1</td>
</tr>
<tr>
<td>Poultry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; Crops, Forestry &amp;</td>
<td>6,061</td>
<td>789</td>
<td>13.0</td>
<td>3,559</td>
<td>58.7</td>
<td>296</td>
<td>4.9</td>
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<tr>
<td>Soil Conservation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Ornamental</td>
<td>928</td>
<td>141</td>
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<td>27</td>
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<td>Horticulture</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>Wildlife &amp;</td>
<td>373</td>
<td>114</td>
<td>30.6</td>
<td>176</td>
<td>47.2</td>
<td>3</td>
<td>.8</td>
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<tr>
<td>Recreation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Farm Service</td>
<td>1,844</td>
<td>163</td>
<td>8.8</td>
<td>924</td>
<td>50.1</td>
<td>202</td>
<td>10.9</td>
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<tr>
<td>Agriculture Service</td>
<td>2,775</td>
<td>65</td>
<td>2.3</td>
<td>841</td>
<td>30.3</td>
<td>149</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>20,025</td>
<td>2,115</td>
<td>10.6</td>
<td>10,304</td>
<td>51.5</td>
<td>1,338</td>
<td>6.7</td>
</tr>
</tbody>
</table>
Residential Background Preferred of New Employees

A farm-reared background was considered desirable in 49.8 per cent of the job cases, indicating that this factor was not an absolute requirement for entering nonfarm agricultural occupations.

Table X shows the kind of background preferred by the nonfarm agricultural firms for new employees.

A fact outstanding in Table X is that 44.1 per cent of the nonfarm agricultural employees will be replaced without regard to their residential background -- emphasis was placed upon ability to perform work required rather than the place the competencies were acquired. In the case of two families -- Wildlife and Recreation, and Ornamental Horticulture -- 70.5 and 69.1 per cent respectively of the vacancies will be filled with no preference as to residential background.

A rather surprising revelation was that rural nonfarm and urban residential backgrounds were not considered as factors in employment. Combined, the two backgrounds received a preference rating in only 6.1 per cent of the cases. This, when viewed with the 49.8 per cent preference for the farm reared, indicated that rural youth have a "head start" over those with urban backgrounds.

Farm Experience Preferred of New Employees

Almost one-half of the employees having agricultural competencies, 9,973, would be replaced, as vacancies occur, with applicants having a farm residential background. Data referring to the kind of farm residential background preferred -- commercial farm, non-commercial farm, or no preference as to the kind -- appear in Table XI.
<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Number of Employees</th>
<th>Farm</th>
<th>Rural</th>
<th>Urban</th>
<th>No Preference</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Per</td>
<td>Per</td>
<td>Per</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>Cent</td>
<td>No.</td>
<td>Cent</td>
</tr>
<tr>
<td>Farm Machinery Sales &amp; Service</td>
<td>1,828</td>
<td>1,059</td>
<td>57.9</td>
<td>159</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>503</td>
<td>33.0</td>
<td>1,476</td>
<td>48.8</td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td>3,022</td>
<td>1,331</td>
<td>44.1</td>
<td>155</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,476</td>
<td>48.8</td>
<td>1,598</td>
<td>50.0</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td>5,194</td>
<td>1,498</td>
<td>46.9</td>
<td>80</td>
<td>2.5</td>
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<td></td>
<td></td>
<td>1,598</td>
<td>50.0</td>
<td>2,406</td>
<td>39.7</td>
</tr>
<tr>
<td>Crops, Forestry &amp; Soil Conservation</td>
<td>6,061</td>
<td>3,253</td>
<td>53.7</td>
<td>392</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,406</td>
<td>39.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>928</td>
<td>263</td>
<td>28.3</td>
<td>20</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>641</td>
<td>69.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td>373</td>
<td>89</td>
<td>23.9</td>
<td>19</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>263</td>
<td>70.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm Service</td>
<td>1,844</td>
<td>871</td>
<td>47.3</td>
<td>93</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>854</td>
<td>46.3</td>
<td>984</td>
<td>35.4</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>2,775</td>
<td>1,609</td>
<td>58.0</td>
<td>171</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>984</td>
<td>35.4</td>
<td>8,825</td>
<td>44.1</td>
</tr>
<tr>
<td>Total</td>
<td>20,025</td>
<td>9,973</td>
<td>49.8</td>
<td>1,089</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8,825</td>
<td>44.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE XI

**FARM EXPERIENCE PREFERRED OF NEW EMPLOYEES**

<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Number of Employees</th>
<th>Commercial Farm</th>
<th>Non-Commercial Farm</th>
<th>No Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Per Cent</td>
<td>No.</td>
<td>Per Cent</td>
</tr>
<tr>
<td>Farm Machinery Sales &amp; Service</td>
<td>1,059</td>
<td>36.0</td>
<td>348</td>
<td>32.8</td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td>1,331</td>
<td>47.8</td>
<td>292</td>
<td>21.9</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td>1,498</td>
<td>38.9</td>
<td>212</td>
<td>14.2</td>
</tr>
<tr>
<td>Crops, Forestry &amp; Soil Conservation</td>
<td>3,253</td>
<td>15.5</td>
<td>917</td>
<td>28.1</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>263</td>
<td>51.8</td>
<td>75</td>
<td>28.5</td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td>89</td>
<td>14.7</td>
<td>29</td>
<td>32.5</td>
</tr>
<tr>
<td>Farm Service</td>
<td>871</td>
<td>37.9</td>
<td>274</td>
<td>31.5</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>1,609</td>
<td>41.6</td>
<td>463</td>
<td>28.8</td>
</tr>
<tr>
<td>Total</td>
<td>9,973</td>
<td>32.5</td>
<td>2,610</td>
<td>26.2</td>
</tr>
</tbody>
</table>
Commercial farm experience took precedence over that obtained on a non-commercial farm. However, for 41.3 per cent of the workers where farm residential background was a factor, no preference was listed as to kind or type of farm experience. Statewide, where farm background was favored, it was indicated that employers felt that 58.7 per cent of the jobs would best be filled with persons having a specific kind of farm experience. Significantly, firms specializing in farm or agriculture service or the processing of an agricultural commodity were unwilling to restrict employment to those with a farm background or to a particular kind of farm. Emphasis was placed on formal education and specific training leading to job entry qualifications.

**Agricultural Areas in Which Nonfarm Agricultural Workers Must Have Competencies**

One of the major objectives of the research was to determine job requirements, in terms of knowledge and skill in agricultural subjects, needed by prospective employees in order to enter and advance in nonfarm agricultural occupations. These requirements, along with educational level, make up the heart of the study.

To record information and guide interviewees in summarizing job requirements in terms of agricultural competencies necessary in the different job titles, agricultural subject matter was divided into four broad areas: (1) Animal Science, (2) Plant Science, (3) Agricultural Business Management and Marketing, and (4) Agricultural Mechanization and Automation. Each area was divided into categories which described specialized agricultural knowledge to aid employers in identifying particular skills associated with the performance of each job title.
Tables XII-1 through XII-8 show agricultural subject areas in which employees must have training, according to occupational families and levels of employment. Specific knowledge and skill associated with particular job titles are not identified in this report.

Data in the Tables XII-1 through XII-8 indicate the rank that employers gave to the various competency groups in terms of the need for these competencies to be developed in future employees. In order to report effectively the results of this section of the survey a competency rating scale was developed as follows: high (1.8-3.0), medium (1.4-1.7), low (1.0-1.3). This ranking enables educators to place emphasis on agricultural subject matter training in terms of job entry requirements as indicated by the firms employing nonfarm agricultural workers. Definite trends were in evidence in all occupational families:

1. Generally speaking, a rather broad coverage of all subject matter areas in agriculture was required of all nonfarm agricultural workers.

2. The particular product processed or sold and the service for sale within an agricultural family determined the subject matter areas involved.

3. Data indicate that as a usual rule employees at the managerial and supervisory levels were required to have broad knowledge in subject matter areas as well as specialized knowledge in relation to a particular business.

4. Employees at the professional level were expected to have training in all of the agricultural areas, but at the same time they must have intensive training in their area of specialization.

5. Depending on the family, the coverage of agricultural subject matter for technical workers varied. In all cases intensive training was required in the particular phase making up the subject matter content pertinent to job performance activities of the employee.

6. In the skilled and semiskilled levels workers were intensively trained in a particular area or one of the divisions making up an area.
### TABLE XII-1

**AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES**

**FARM MACHINERY SALES AND SERVICE**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>31</td>
<td>1.041</td>
<td>1.737</td>
<td>1.771</td>
<td>2.240</td>
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<tr>
<td>Technical</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Managerial</td>
<td>362</td>
<td>1.459</td>
<td>1.739</td>
<td>2.276</td>
<td>2.242</td>
</tr>
<tr>
<td>Supervisory</td>
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<td>1.095</td>
<td>1.398</td>
<td>1.529</td>
<td>2.262</td>
</tr>
<tr>
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<td>354</td>
<td>1.510</td>
<td>1.733</td>
<td>2.010</td>
<td>2.131</td>
</tr>
<tr>
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<td>88</td>
<td>1.062</td>
<td>1.122</td>
<td>2.011</td>
<td>1.304</td>
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<tr>
<td>Skilled</td>
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<td>1.118</td>
<td>1.270</td>
<td>1.360</td>
<td>2.198</td>
</tr>
<tr>
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<td>173</td>
<td>1.085</td>
<td>1.217</td>
<td>1.261</td>
<td>2.011</td>
</tr>
<tr>
<td>Unskilled</td>
<td>8</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.611</td>
</tr>
</tbody>
</table>

**Competency Rating Scale:**
- High (1.8 - 3.0)
- Medium (1.4 - 1.7)
- Low (1.0 - 1.3)
### TABLE XII-2

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

**FARM SUPPLIES AND EQUIPMENT**

<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
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<td>1.833</td>
<td>1.909</td>
<td>2.208</td>
<td>1.611</td>
</tr>
<tr>
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<td>1.807</td>
<td>1.829</td>
<td>1.979</td>
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<tr>
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<td>1.592</td>
<td>1.646</td>
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<td>1.296</td>
<td>1.420</td>
<td>2.057</td>
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<tr>
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<td>1.236</td>
<td>1.272</td>
<td>1.326</td>
<td>1.695</td>
</tr>
<tr>
<td>Unskilled</td>
<td>362</td>
<td>1.267</td>
<td>1.316</td>
<td>1.224</td>
<td>1.609</td>
</tr>
</tbody>
</table>

Competency Rating Scale
- High (1.8 - 3.0)
- Medium (1.4 - 1.7)
- Low (1.0 - 1.3)
TABLE XII-3

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

LIVESTOCK AND POULTRY

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>3</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>2.344</td>
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<td>1.565</td>
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<td>2.136</td>
<td>1.310</td>
<td>2.176</td>
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</tr>
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<td>1.924</td>
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<td>1.820</td>
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<td>1.097</td>
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<td>1.249</td>
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<td>1.037</td>
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<td>1.135</td>
</tr>
<tr>
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<td>1.120</td>
<td>1.455</td>
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<td>1.380</td>
</tr>
<tr>
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<td>1.085</td>
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<td>1.000</td>
<td>1.000</td>
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<td>1.500</td>
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</tbody>
</table>

Competency Rating Scale
- High (1.8 - 3.0)
- Medium (1.4 - 1.7)
- Low (1.0 - 1.3)
TABLE XII-4

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES
CROPS, FORESTRY AND SOIL CONSERVATION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>363</td>
<td>1.347</td>
<td>2.031</td>
<td>2.162</td>
<td>1.807</td>
</tr>
<tr>
<td>Technical</td>
<td>169</td>
<td>1.200</td>
<td>1.695</td>
<td>1.807</td>
<td>1.824</td>
</tr>
<tr>
<td>Managerial</td>
<td>621</td>
<td>1.331</td>
<td>1.750</td>
<td>2.382</td>
<td>1.871</td>
</tr>
<tr>
<td>Supervisory</td>
<td>282</td>
<td>1.086</td>
<td>1.560</td>
<td>1.846</td>
<td>1.854</td>
</tr>
<tr>
<td>Sales</td>
<td>233</td>
<td>1.197</td>
<td>1.720</td>
<td>1.946</td>
<td>1.517</td>
</tr>
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<td>Office</td>
<td>246</td>
<td>1.090</td>
<td>1.394</td>
<td>1.965</td>
<td>1.250</td>
</tr>
<tr>
<td>Skilled</td>
<td>919</td>
<td>1.067</td>
<td>1.342</td>
<td>1.322</td>
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</tr>
<tr>
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<td>1,941</td>
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<td>1.319</td>
<td>1.259</td>
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</tr>
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<td>1,287</td>
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<td>1.108</td>
<td>1.474</td>
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</table>

Competency Rating Scale
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)
### TABLE XII-5

**AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES**

**ORNAMENTAL HORTICULTURE**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>20</td>
<td>2.125</td>
<td>2.909</td>
<td>2.750</td>
<td>2.167</td>
</tr>
<tr>
<td>Technical</td>
<td>2</td>
<td>1.000</td>
<td>1.727</td>
<td>1.000</td>
<td>1.667</td>
</tr>
<tr>
<td>Managerial</td>
<td>199</td>
<td>1.003</td>
<td>2.336</td>
<td>2.227</td>
<td>2.113</td>
</tr>
<tr>
<td>Supervisory</td>
<td>22</td>
<td>1.000</td>
<td>2.545</td>
<td>2.500</td>
<td>2.541</td>
</tr>
<tr>
<td>Sales</td>
<td>83</td>
<td>1.000</td>
<td>2.030</td>
<td>1.972</td>
<td>1.611</td>
</tr>
<tr>
<td>Office</td>
<td>13</td>
<td>1.000</td>
<td>1.591</td>
<td>1.937</td>
<td>1.750</td>
</tr>
<tr>
<td>Skilled</td>
<td>102</td>
<td>1.047</td>
<td>2.017</td>
<td>1.289</td>
<td>1.166</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>61</td>
<td>1.000</td>
<td>1.958</td>
<td>1.407</td>
<td>1.664</td>
</tr>
<tr>
<td>Unskilled</td>
<td>426</td>
<td>1.057</td>
<td>1.743</td>
<td>1.245</td>
<td>1.794</td>
</tr>
</tbody>
</table>

** Competency Rating Scale**
- High (1.8 - 3.0)
- Medium (1.4 - 1.7)
- Low (1.0 - 1.3)
### TABLE XII-6

**AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES**

**WILDLIFE AND RECREATION**

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Number</th>
<th>Average Competency Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>17</td>
<td>2.000</td>
</tr>
<tr>
<td>Technical</td>
<td>2</td>
<td>2.000</td>
</tr>
<tr>
<td>Managerial</td>
<td>34</td>
<td>1.427</td>
</tr>
<tr>
<td>Supervisory</td>
<td>51</td>
<td>1.449</td>
</tr>
<tr>
<td>Sales</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Office</td>
<td>1</td>
<td>2.000</td>
</tr>
<tr>
<td>Skilled</td>
<td>10</td>
<td>1.313</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>42</td>
<td>1.162</td>
</tr>
<tr>
<td>Unskilled</td>
<td>216</td>
<td>1.340</td>
</tr>
</tbody>
</table>

**Competency Rating Scale**
- High (1.8 - 3.0)
- Medium (1.4 - 1.7)
- Low (1.0 - 1.3)
### TABLE XII-7

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

**FARM SERVICE**

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Number</th>
<th>Average Competency Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>64</td>
<td>2.083</td>
</tr>
<tr>
<td>Technical</td>
<td>164</td>
<td>1.617</td>
</tr>
<tr>
<td>Managerial</td>
<td>381</td>
<td>1.407</td>
</tr>
<tr>
<td>Supervisory</td>
<td>87</td>
<td>1.956</td>
</tr>
<tr>
<td>Sales</td>
<td>111</td>
<td>1.450</td>
</tr>
<tr>
<td>Office</td>
<td>155</td>
<td>1.151</td>
</tr>
<tr>
<td>Skilled</td>
<td>395</td>
<td>1.119</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>373</td>
<td>1.105</td>
</tr>
<tr>
<td>Unskilled</td>
<td>114</td>
<td>1.046</td>
</tr>
</tbody>
</table>

**Competency Rating Scale**
- High (1.8 - 3.0)
- Medium (1.4 - 1.7)
- Low (1.0 - 1.3)
TABLE XII-8

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

AGRICULTURAL SERVICE

<table>
<thead>
<tr>
<th>Level of Employment</th>
<th>Number</th>
<th>Average Competency Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>793</td>
<td>2.248</td>
</tr>
<tr>
<td>Technical</td>
<td>820</td>
<td>1.520</td>
</tr>
<tr>
<td>Managerial</td>
<td>217</td>
<td>1.740</td>
</tr>
<tr>
<td>Supervisory</td>
<td>92</td>
<td>1.678</td>
</tr>
<tr>
<td>Sales</td>
<td>16</td>
<td>1.250</td>
</tr>
<tr>
<td>Office</td>
<td>453</td>
<td>1.316</td>
</tr>
<tr>
<td>Skilled</td>
<td>153</td>
<td>1.078</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>128</td>
<td>1.595</td>
</tr>
<tr>
<td>Unskilled</td>
<td>103</td>
<td>1.604</td>
</tr>
</tbody>
</table>

Competency Rating Scale
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)
Evidence implying the need for agricultural training at sales and office levels was significant. This indicates the necessity for providing a much broader program of training for persons serving at these levels. These data are in agreement with that of other states indicating that vocational agriculture may support, or be supported by, other vocational subjects taught in the comprehensive high school. More of this type of supporting education must be included in curriculum planning if vocational education is to be effective in preparing youth for the complex world of work.

A further analysis of data presented here shows rather clearly that it is no longer sufficient just to have prospective employees available and willing to work. A premium was placed on education and occupational training, indicating the need for more adequately trained persons to enter the expanding area of nonfarm agriculture.

Data clearly show that each occupational family reflects a "cluster" of jobs at the various employment levels which may be utilized as a basis for developing instructional programs. This is especially true where job titles combine a number of skills or have a common core of subject matter.

**Continuing Education Required of Nonfarm Agricultural Employees**

A portion of the study was devoted to a determination of the kind of continuing education required of employees if they aspired to advance in the firm, to the type of educational facility used for training, and the degree of participation by employees. Table XIII contains the tabulated results of employer responses.

An interesting pattern developed as the data were analyzed. On-the-job training and firm or industry schools were usually used for upgrading
<table>
<thead>
<tr>
<th>Occupational Family</th>
<th>Number of Employees</th>
<th>Firm or Industry School</th>
<th>On-the-Job Training</th>
<th>Public School</th>
<th>Vocational School</th>
<th>Agri. College</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Machinery Sales &amp; Service</td>
<td>1,828</td>
<td>1,139 62.3</td>
<td>1,476 80.7</td>
<td>71 3.9</td>
<td>267 14.6</td>
<td>74 4.0</td>
<td>33</td>
</tr>
<tr>
<td>Farm Supplies &amp; Equipment</td>
<td>3,022</td>
<td>1,298 43.0</td>
<td>2,376 78.6</td>
<td>118 3.9</td>
<td>316 10.4</td>
<td>223 7.4</td>
<td>254</td>
</tr>
<tr>
<td>Livestock &amp; Poultry</td>
<td>3,194</td>
<td>1,315 41.2</td>
<td>2,502 78.3</td>
<td>84 2.6</td>
<td>176 5.5</td>
<td>221 6.9</td>
<td>236</td>
</tr>
<tr>
<td>Crops, Forestry &amp; Soil Conservation</td>
<td>6,061</td>
<td>2,272 37.5</td>
<td>4,705 77.6</td>
<td>131 2.2</td>
<td>395 6.5</td>
<td>392 6.4</td>
<td>1,071</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>928</td>
<td>308 33.1</td>
<td>628 67.6</td>
<td>21 2.3</td>
<td>145 15.6</td>
<td>154 16.6</td>
<td>110</td>
</tr>
<tr>
<td>Wildlife &amp; Recreation</td>
<td>373</td>
<td>36 9.7</td>
<td>296 79.4</td>
<td>2 0.5</td>
<td>20 5.4</td>
<td>63 16.9</td>
<td>43</td>
</tr>
<tr>
<td>Farm Service</td>
<td>1,844</td>
<td>743 40.2</td>
<td>1,488 80.6</td>
<td>51 2.8</td>
<td>150 8.1</td>
<td>193 10.5</td>
<td>198</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>2,775</td>
<td>732 26.4</td>
<td>1,865 67.1</td>
<td>67 2.4</td>
<td>96 3.5</td>
<td>615 22.1</td>
<td>505</td>
</tr>
<tr>
<td>Total</td>
<td>20,025</td>
<td>7,834 39.1</td>
<td>15,336 76.7</td>
<td>545 2.7</td>
<td>1,565 7.8</td>
<td>1,935 9.7</td>
<td>2,450</td>
</tr>
</tbody>
</table>
employees -- 76.7 per cent and 39.1 per cent, respectively. The use made of public school programs was almost negligible -- only 545 workers, or 2.7 per cent. Vocational schools and agricultural colleges were indicated as the means for upgrading employees in 7.8 per cent and 9.7 per cent of the cases. Employers did not provide for or require continuing education for 2,450, or 12.3 per cent, of the workers.

Efforts were made in all concerns to have training available for employees on a continuing basis. Expressions by employers indicated that reliance on on-the-job training as the primary resource for employee upgrading was due to a lack of availability of the types of programs needed at the high school or post-high school levels. This points up the need for consideration of an extension of the secondary school program to include training and retraining to meet the needs of industry. This would be consistent with the emerging pattern in vocational education -- that of providing appropriate training and retraining in terms of the needs of the work force.
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The march of technology and science in a modern and progressive society emphasizes more than ever, and for an ever-increasing proportion of the population, the need for development of more salable vocational skills. Workers without competence in keeping with the demands of progress are at a growing disadvantage and will eventually find that they have been written out of the labor market.

This research emphasizes that tremendous shifts have taken place in the agricultural industry in recent years. A broad complex of nonfarm agricultural businesses and services has evolved to facilitate the work of the production farmer. It is a complex involving hundreds of professional, technical, and vocational occupations requiring extensive knowledge and highly developed skills for successful performance. Trends indicate that agriculture will continue to respond to the demands of technology and, with the increase in population, will become even more intricate and specialized in the future. Therefore, individuals aspiring to enter agricultural occupations should become knowledgeable concerning the types of jobs available and their characteristics.

The President's Panel of Consultants on Vocational Education in its summary report recommended that the vocational agriculture program, under federal reimbursement, should be broadened to include training in agricultural occupations other than farming or ranching. This suggestion was implemented in the Morse-Perkins Act of 1963.
In recognition of this need and in anticipation of the broadened responsibility for vocational agriculture, Louisiana began to participate in activities that led to the awarding of a state grant in November 1963 by the State Board of Liquidation of the State Debt. This allotment financed a survey of the nonfarm businesses and agencies in the seven metropolitan areas of the state -- Alexandria, Baton Rouge, Lafayette, Lake Charles, New Orleans, Monroe and Shreveport. As this project neared completion, application was made to the U. S. Office of Education for a grant under terms of Section 4 (c) of the Morse-Perkins Act for funds to carry the study into the smaller cities and towns. The project was funded under contract number OE 5-85-040 and began June 15, 1965. This report combines the results of the studies of the seven metropolitan centers and the 90 semi-urban and rural towns in Louisiana, thus providing a comprehensive state summary of nonfarm agricultural jobs.

This report is arranged to reveal the following information:

(1) Numbers of people employed, numbers needing agricultural competencies, expected numbers of persons to be hired in the next five years, and numbers of job titles.

(2) Characteristics such as age, education, background, and salary.

(3) Agricultural competencies needed to effect job entry and additional education required for continuation and advancement in the firm.

In short, the task of this research has been to accumulate facts concerning nonfarm agricultural occupations within Louisiana, and to inform educators, employers, parents, and high school youth of the abundance of agricultural opportunities existing in this state -- for those who prepare themselves.

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Findings are summarized as follows:

1. There were 2,430 businesses and agencies surveyed, representing the vast agricultural complex of Louisiana. These organizations employed 51,719 workers -- of which 20,025 were required to have competencies in agriculture. Within a five-year period the number of workers with skills and knowledge in agricultural subjects is expected to rise to 21,999.

2. The 20,025 workers were found under 1,699 job titles. Five years hence it is expected that the number of job titles will increase to 1,862, an increase of 9.5 per cent.

3. Occupational families recording the greatest number of workers were those dealing with Crops, Forestry and Soil Conservation; Farm Supplies and Equipment; Livestock and Poultry, and Agricultural Service. These areas also supplied the largest number of job titles.

4. Insofar as the levels of employment were concerned, semiskilled, managerial, skilled, and sales, in the order listed contained the largest number of agricultural workers when all families were considered. Professional workers were found in two families primarily -- Agricultural Service, and Crops, Forestry and Soil Conservation. In proportion to the total number of workers, Wildlife and Recreation listed the largest number of unskilled employees -- 59 per cent.

5. Technician level employees ranked seventh in total number of workers, with the Agricultural Service family utilizing the largest number. These workers would advance in numbers if state colleges and universities had been included in the survey.

6. Employers interviewed indicated that the minimum age would not be less than 23 years for replacing employees leaving the business. This implies that employers would, in most cases, discriminate against hiring youngsters directly out of high school if more mature applicants were available. Generally speaking, 48 years is considered to be the maximum age for hiring new workers. All families and all levels of employment presented an agricultural working force averaging about 34 years.

7. A definite pattern was apparent in all firms relative to salary schedules. Employees were paid in relation to their background of education, training, experience and responsibility, beginning with low pay for the unskilled followed by substantial increases for the skilled and continuing upward through the management and professional levels. As a rule, employers felt that a well trained worker was the best investment their business could make, and they were ready to pay higher salaries for well trained individuals. Significant salary advances were given with tenure, with the exception of the semiskilled and unskilled categories where pay remained at low levels.
8. Generally, a high school education was a prerequisite for entry into nonfarm agricultural occupations. Only 10.6 per cent of the jobs would be filled with applicants who were not high school graduates. Taking into account all families and all levels of employment, one in four prospective employees was expected to have a college degree or some college training.

9. Residential background was a factor considered by employers when replacing employees in only 55.2 per cent of the job titles. Approximately one-half of the positions could best be filled with workers with farm backgrounds. Experience gained by the prospective employees on a commercial farm was preferred to that obtained on a non-commercial farm. Employers indicated that applicants with urban backgrounds would not be discriminated against. However, only a small number of cases were recorded where an urban background was preferable to the farm.

10. The degree of competency in agricultural subjects required of employees varied according to the work performed in each job title and each occupational family. However, certain similarities existed: (1) generally, a rather broad coverage of subject matter was required of all workers above the semiskilled and unskilled levels; (2) employees at the management and supervisory levels, in addition to having specialized knowledge in relation to a particular business, were expected to be widely knowledgeable in agricultural subjects; (3) employees at the professional level were expected to have some training in all agricultural areas, but at the same time they must have intensive training in their area of specialization; (4) the coverage of agricultural subject matter for technical workers varied, depending on the family, but in all cases intensive training was required in the subject matter content pertinent to job performance; (5) skilled level workers possessed knowledge and skill in a particular area or one of the divisions making up an area.

11. Efforts were made in all concerns to have training for employees on a continuing basis. On-the-job training, and firm or industry schools, were the chief means of providing such training. Employers made limited use of training provided through public school adult education programs and vocational programs.

12. Education and training for job entry were the restrictions placed on the great majority of job titles. Some of the agencies had job titles requiring civil service ratings, while only a slight percentage were under contract with labor. Most jobs at the professional level required a college degree and in some instances a professional degree. A small number of jobs at the technical and skilled levels required licenses.

13. Considerable growth in terms of job titles and numbers of employees was reported by all businesses and agencies, particularly those supplying farmers with items and services necessary for production, followed by those processing and marketing farm produced commodities.
14. Employers expressed a need for a supply of trained workers, emphasizing the value of education, training and skill. Of special significance was the emphasis placed upon occupational training obtained prior to job entry.

Conclusions

This study of the nonfarm agricultural complex of the state depicts rather vividly the creation of new fields of employment owing to the combining of science and technology. The host of jobs once available to youth have been eliminated from farm work, but at the same time the applications of research findings and automation have resulted in new occupational fields where the number of job opportunities exceed those formerly supplied on the farm.

Significantly, the jobs lost because of advancing technology in agriculture comprise those in which many untrained farm youth formerly found employment. Jobs emerging in off-farm agriculture demand an ever rising level of education, training and skill -- thus, to a large extent, eliminating the untrained.

The off-farm agricultural complex surveyed in Louisiana employed 51,719 people, of which a large portion, 20,025, were required to have certain knowledge and skill in agricultural subjects before job entry. For these workers, education in agriculture is a continuing process, as it is for the farmer. The untrained and the unskilled worker cannot hope to compete successfully in this manpower market.

Farm youth, because of work experiences gained at home, have a "head start" toward gainful employment in any segment of the nonfarm agricultural complex providing they have the interest and are willing to work, and if the necessary educational and training opportunities are made available and they utilize them.
Evidence assembled in this study "points up" the many employment opportunities for individuals trained in agriculture. How to make rural youth employable by education and training prior to job entry poses a very real problem to educators.

Evidence also describes areas where employment opportunities exist. If vocational agriculture is going to make a worthy contribution to occupational training, then efforts must be made to gear instruction to the needs of areas defined.

This research is one phase of an effort to make vocational agriculture more meaningful to youth in relation to job preparation. It is felt that the evidence presented will assist teachers and school administrators in making decisions concerning the broadening of vocational agriculture programs in keeping with the occupational interests and needs of youth:

1. Off-farm agricultural occupations are found in businesses and services with diverse functions. Although concentrated most heavily in services and retail sales, they are also found in manufacturing or processing, wholesaling, recreation, specialized agricultural production and education.

2. There is a vast array of separate and distinct job titles in which workers use agricultural competencies. The proportion of time devoted to the use of such competencies on the job varies widely with job titles. However, on the average, workers in non-farm agricultural occupations use agricultural knowledge and skill a high percentage of the time.

3. Survey results point out that the nonfarm agricultural complex is a vibrant segment of Louisiana's economy,-- employing 51,719 persons of which 39.8 per cent perform duties requiring knowledge and skill in agriculture.

Educational level required prior to job entry varied throughout the entire complex: the college graduate with a professional degree, the college graduate with an agricultural speciality, and the high school graduate with agricultural training. The great number of jobs and wide range of job requirements offer the prospective applicant considerable challenge with regard to testing his interests and ultimately making a job selection.
Roughly one-third of the total employees performed duties in the Professional, Technical, Managerial and Supervisory employment levels. These employees are the main gears of the organization and collectively offer the most promise for satisfactory employment. They direct the work of the other two-thirds.

4. Agriculture in Louisiana is growing rapidly as evidenced by a substantial increase expected in number of employees as well as job titles for the next five-year period.

More than 1,600 job titles provide a vast array of opportunities for the interested and qualified. These jobs differ in training requirements, work involved, salary scales and opportunities for advancement.

Salary schedules at all levels in all occupational families were found to be in terms of training and work performed. Jobs at the professional, technical and managerial levels demand more training, but also pay more. Jobs at the semiskilled and unskilled levels paid less, required a limited amount of training and offered little hope for advancement.

5. A high school education and some knowledge and experience in agriculture was sufficient for 51.5 per cent of the employees in nonfarm agricultural occupations. Employers reported the significant figure of 32.9 per cent of workers needing varying degrees of advanced training to meet job requirements. Employers listed post-high school training gained in vocational-technical schools and college as being preferable. Successful applicants to jobs which are considered professional must have a college degree, a qualification considered minimum in many other areas of employment. Continuous training, regardless of employee rank, was expected in all occupational families. On-the-job training, firm or industry schools, and programs offered at the secondary school or college levels are means of effecting such training.
Recommendations

Vocational education for occupations in nonfarm agriculture has recently assumed a new importance in Louisiana, as it has in the entire nation. The alarming rise in unemployment and under-employment of youth; the shortage of sorely needed trained personnel in the technical, semi-professional and skilled levels; the rising need for retraining workers displaced by automation; and the demand for new educational opportunities at the secondary and post-secondary school levels have forced a critical re-examination of vocational agriculture and its seeming neglect of occupational information.

This investigation revealed that agriculture is a part of society in which the occupational structure is changing rapidly. Some occupations have expanded, others have completely disappeared, while an entire new catalog of jobs has come upon the scene, making necessary an entirely fresh concept of training programs.

National publicity has given agriculture a bad image from an occupational standpoint. However, there is no decline in job openings; opportunities are far in advance of training resources, if non-farm jobs are considered. A rising level of competency for prospective workers is demanded as new jobs emerge and those existing increase in importance. Vocational agricultural education, if it responds to the stimuli, is on the launching pad of a period of intensive growth and development.

Research indicates that rural youth, particularly over the past decade, have not benefitted fully from occupational opportunities available to them in agriculture. Training for employment other than that offered in traditional programs of vocational agriculture is no doubt the
"number one" need on the local scene. Broadened programs will be the key to a new horizon with hundreds of job opportunities never before listed available to individuals. With interest and desire for employment in agricultural fields at a new high, training is the missing link.

All sectors of agriculture must look to schools, particularly at the secondary level, to provide pre-employment education. This training must range from occupational information to education in the sciences and technology. As society advances to a more highly skilled age, the school must provide more training for a growing percentage of our school population who expect to not only qualify to become adult members of society but wish to prepare for a future occupation while in high school.

What shall the vocational agriculture program include to fully meet the needs of students? This complex problem faces the more than 300 high schools in Louisiana offering vocational agriculture. The main problem is the assembling of sufficient teaching resources and the development of programs broad enough to be truly functional in occupational education.

Vocational agriculture as an area of public education in Louisiana must take action on the following recommendations, which in the opinion of the researchers are supported by factual evidence:

1. This study supports the premise that agriculture is more than farm production, involving thousands of workers engaged in furnishing supplies and services to farmers and to a vast number who process and distribute farm commodities over the state and nation. Employment opportunities for the agriculturally trained extend over the entire agricultural complex of the state.

Production farming is still the basic segment of agriculture but changing demands have emphasized the urgent need for trained individuals in the total agricultural industry.

Secondary school programs in vocational agriculture in Louisiana must be vastly expanded with a definite overhaul of training purpose if the demand for workers in production farming and
nonfarm agriculture is to be filled with agriculturally trained individuals.

2. Traditionally, vocational agriculture has been restricted to schools located in the rural areas of the state. To date relatively few boys attending urban schools have had an opportunity to enroll, yet many of them can profit by the training.

Research in this state and the nation shows that many urban boys enter nonfarm agricultural occupations. Reasons cited for this occupational selection vary from family connections with the business to an interest acquired because of casual contact with some phase of agriculture. These individuals have a right to expect some formal preparation in their interest area.

Vocational agricultural training must be expanded to include more training opportunities. The Vocational Education Act of 1963 clearly states that monies allotted for agriculture may be used for vocational education in any occupation involving knowledge and skill in agricultural subjects whether or not such occupations involve the work of the farm.

3. Programs must be developed for individuals who will leave the home community to effect job entry. Generally, workers move to areas where employment opportunities are known to exist, thereby making it essential that the school keep an up-to-date catalog of occupational information. Work force mobility must be understood and those charged with the responsibility of program development and maintenance should keep abreast of manpower statistics, the requirements of the state and regional labor markets, as well as the local situation. The school today is no longer an educational institution specifically for the area in which it is located. It must serve the educational needs of its graduates who will find employment opportunities statewide, nationwide and internationally.

4. Subject matter in agriculture may be classified under four broad categories: Plant Science, Animal Science, Agricultural Business Management and Marketing, and Agricultural Mechanics and Automation. Functional programs in vocational agriculture must provide for student experiences involving these agricultural science areas, including aspects of production and processing.

Developments in industry make it increasingly evident that detailed job descriptions must be the basis for building future training programs and that vocational training must be mixed with other subjects according to the demands of the job.

5. Employers are emphasizing that industry today demands a well-educated worker, making it of paramount importance that vocational agriculture not be regarded as a separate feature completely apart from the rest of the school program. It must supplement a well-planned program of general education for those preparing for entry into agricultural jobs.
Vocational education in any area must be considered as an enriching factor to the total educational program and not as a tolerated separate entity.

6. Work experiences are an integral part of any vocational education program. If a program of education is to turn out employables, opportunities must be provided that will enable students to perform in a job situation. Therefore, it is important that schools offering programs leading to employment in nonfarm agricultural occupations enter into training contracts with nearby cooperating agricultural businesses and agencies so that on-the-job training may be obtained under the supervision of the school.

Consideration should be given to the development of self-contained school plants having laboratories for serving science programs and providing vocational agriculture with demonstration projects, besides giving students experiences in selected areas of agriculture.

7. A review of educational qualifications for the various nonfarm agricultural jobs identified in this study emphasizes the very important point that the secondary school must prepare interested students for education beyond high school. It is evident that those interested in a technical or professional job must pursue training either in a technical school, a junior college or complete a college course.

The high school is not terminal, even though the employee does not attend a post high school program or go to college. Industry today requires that workers continue training so that they may be more effective and so that they may advance in the company. It also provides the means for their additional education.

Regardless of the employment aims of the student, the school program must prepare for continuing education.

8. The schools must be responsible for placement and follow-up. In the past, schools at the secondary level have not considered this an educational function. The Vocational Act of 1963 provides for the cooperation of the Employment Security Division with all schools offering programs of vocational education in job identification and job placement.

The maintenance of up-to-date employment information relating to former students is a must for schools having programs of vocational agriculture. Ultimate high school graduation with vocational agricultural training in no way assures successful job entry. Students must have help in selecting an occupation, in preparing for a job, and in securing employment upon graduation. The maintenance of an accurate follow-up record of former students is an absolute necessity for a sound counseling program.
9. Educators must consider the development of a more comprehensive high school. The decrease in rural population and the increasing difficulty of communities involved to provide training resources has brought about a trend toward a comprehensive educational system located in or near heavily populated urban areas.

The pressures created by the rapid rate of change are so great that they certainly cannot be ignored by lay or professional leaders in education. Effective planning and development in modern educational programs require a keen awareness of the extent of the modification in science and technology. Solution of problems developing as a result of this revolution will require new developments in technology and will make new demands upon manpower.

The comprehensive high school, with its superior resources, can provide broad general education for all youth, as well as supplying more specialized training for each individual which is designed to best serve his interests and needs.

Recent research findings lend support to the trend in educational thinking that urban schools, due to the needs of agricultural businesses and agencies, should seriously consider the addition of programs in vocational agriculture. These schools can more easily assemble facilities and equipment for teaching purposes that are used in the occupations, and the close proximity of agriculturally-oriented businesses and agencies enables the development of adequate programs of work experience.

10. Research and development, successfully used as tools by business and industry, are assigned an important place in the future of vocational education. Research in nonfarm agricultural occupations must be continuous, and developmental centers applying research results at the local level must be set up if realistic training programs are to be developed. Vocational education should embody the philosophy that all citizens must have access to education and training that is of high quality and realistic in terms of opportunities for gainful employment.
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Griffin, Warren L., The Nature of Agricultural Occupations, Other than Farming, in Saline County, Missouri, Volume 65, Number 32, Education Series, Number 91, University of Missouri, Office of Publications, Columbus, Missouri, November 16, 1964.


Judge, Homer V., *Employment Opportunities and Needed Competencies In Off-Farm Agricultural Occupations In Massachusetts*, School of Education, University of Massachusetts, Amherst, June, 1965.

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APPENDIX A

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer__________________________
Date of Interview__________________________

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form I

Firm Number____________________Occupational Family______________________________

I. Name of Business or Service____________________________________________________

II. Address________________________ Town__________________________

III. Person Interviewed____________________________________________________________

Position__________________________________________________________

IV. Estimated per cent gross income that is agriculturally oriented___________

V. Major agricultural products and/or functions of business or service


VI. Employees in this business or service (Total Number)____________________

A. For employees needing competencies in agriculture, complete the following:

<table>
<thead>
<tr>
<th>Existing Job Titles</th>
<th>Number of Employees</th>
<th>Presently</th>
<th>Five Years Hence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Full-Time</td>
<td>Part-Time</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

69
Form I (Cont'd)

<table>
<thead>
<tr>
<th>Existing Job Titles</th>
<th>Presently</th>
<th>Five Years Hence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-Time</td>
<td>Part-Time</td>
</tr>
<tr>
<td></td>
<td>Full-Time</td>
<td>Part-Time</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Anticipated New Job Titles

|                  |           |                  |
|                  |           |                  |
|                  |           |                  |
|                  |           |                  |

Fill out a separate Form II for each job title listed above.
Louisiana State University  
College of Agriculture  
Department of Agricultural Education  
Baton Rouge, Louisiana

Interviewer__________________  
Date of Interview__________________

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in  
Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form II

Firm Number_____  
Occupational Family_____  
Level of Employment_____

I. Name and Address of Firm__________________________

II. Job Title_____________________________________

III. Number of workers in this Job Title

<table>
<thead>
<tr>
<th>Full-Time</th>
<th>Part-Time</th>
</tr>
</thead>
</table>

IV. Anticipated Number of workers Five Years Hence

<table>
<thead>
<tr>
<th>Full-Time</th>
<th>Part-Time</th>
</tr>
</thead>
</table>

V. Average Age  
Minimum for Entry_____  
Maximum for Entry_____

VI. Wages or Salary Per Month: (Beginning - Maximum - Present)

| 2. 201-250 | 5. 351-400 | 8. 501-550 | 11. 651-700 |
| 3. 251-300 | 6. 401-450 | 9. 551-600 | 12. 701 and above |

VII. Activities and Duties of Persons with this Job Title (Detail)

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

71


VIII. Agricultural competencies with which worker must be familiar to do job

A. Area: **Animal Science**

<table>
<thead>
<tr>
<th>Necessary</th>
<th>Desirable</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Breeding Farm Animals
2. Livestock Feeding and Nutrition
3. Sanitation, Disease and Parasite Control
4. Housing and Equipment
5. Management
6. The Dairy Manufacturing Industry
7. Processing

- Packing Plants
- Creameries
- Poultry Processing
- Butchering
8. Marketing

- Packing Plants
- Creameries
- Poultry Processing Plants
- Livestock Auctions

B. Area: **Plant Science**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Propagation
10. Soils and Fertilization
11. Control of Insects  Diseases  Weeds
12. Management
13. Production of Ornamental Plants
14. Landscaping
15. Ginning
16. Warehousing

72
### B. Area: **Plant Science** (cont'd)

<table>
<thead>
<tr>
<th>Necessary</th>
<th>Desirable</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>17. Processing (food, seed, grain, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18. Marketing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19. Forestry</td>
</tr>
</tbody>
</table>

- Establishing a Stand
- Hardwood Control
- Fire Control
- Estimating and Grading
- Disease Control
- Insect Control
- Harvesting
- Marketing
- Manufacturing
- Pulp Wood

### C. Area: **Agricultural Business Management and Marketing**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>20. Records and Accounts, Budgeting and Analysis</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>21. Agricultural Financing, Credit and Insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22. Farm Organization and Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23. Labor Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24. Marketing Problems and Practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25. Agricultural Policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26. Agricultural and Related Price Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27. Cooperatives and Business Organizations</td>
</tr>
</tbody>
</table>

### D. Area: **Agricultural Mechanics and Automation**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>28. Farm Power and Machinery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>29. Farm Buildings and Conveniences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30. Farm Electrification and Processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31. Soil and Water Conservation</td>
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</table>
D. Area: **Agricultural Mechanics and Automation** (cont'd)

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<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   32. Farm Shop (welding, plumbing, etc.)  
   33. Farm Construction and Maintenance  

E. Other Agricultural competencies that are needed for this Job Title

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

IX. Educational Level Desired for Job Titles (Check only one)

   1. Less than High School Graduate  
   2. High School Graduate  
   3. Post High School Technical Education  
   4. Some College  
   5. College Degree (Baccalaureate)  
   6. Master's Degree  
   7. Doctor's Degree  
   8. No Preference

X. Residential Background (Check only one)

   1. Farm  
   2. Rural, nonfarm  
   3. Urban  
   4. No Preference

XI. Farm Experience

   1. On a commercial farm  
   2. On a noncommercial farm  
   3. No Preference  

74
XII. Experience Desired to Enter this Job Title

________________________________________________________________________
________________________________________________________________________

XIII. Limitations on Entering this Job Title

A. Licensing or Certification
   ____ 1. Professional
   ____ 2. Industrial
   ____ 3. Civil Service

B. Labor Law Restrictions

________________________________________________________________________

C. Labor Union Restrictions

________________________________________________________________________

D. Other (specify)

________________________________________________________________________

XIV. Education Required to Advance in this Job Title

A. Technical short course or training provided by:
   ____ 1. Your firm or the industry as a whole
   ____ 2. On-the-job training
   ____ 3. Public school (adult education)
   ____ 4. A vocational school
   ____ 5. An agricultural college
   ____ 6. None
### Form I

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>1 - 4</td>
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<td>5</td>
<td>Occupational Family</td>
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<tr>
<td>6 - 7</td>
<td>Town</td>
</tr>
<tr>
<td>8 - 9</td>
<td>Parish</td>
</tr>
<tr>
<td>10</td>
<td>Area</td>
</tr>
<tr>
<td>11 - 13</td>
<td>% Gross Income</td>
</tr>
<tr>
<td>14 - 16</td>
<td>Total Number of Employees</td>
</tr>
<tr>
<td>17 - 18</td>
<td>Number Job Titles</td>
</tr>
<tr>
<td>19 - 21</td>
<td>Number Needing Agricultural Competencies</td>
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<td>22 - 23</td>
<td>Number Anticipated New Job Titles</td>
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### Form II

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<td>Occupational Family</td>
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<tr>
<td>6</td>
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<tr>
<td>7 - 8</td>
<td>Job Title</td>
</tr>
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<td>9 - 10</td>
<td>Number Workers (Now) Full-Time</td>
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<tr>
<td>11 - 12</td>
<td>Number Workers (Now) Part-Time</td>
</tr>
<tr>
<td>13 - 14</td>
<td>Number Workers (5 years) Full-Time</td>
</tr>
<tr>
<td>15 - 16</td>
<td>Number Workers (5 years) Part-Time</td>
</tr>
<tr>
<td>17 - 18</td>
<td>Average Age</td>
</tr>
<tr>
<td>19 - 20</td>
<td>Minimum Age</td>
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<tr>
<td>21 - 22</td>
<td>Maximum Age</td>
</tr>
<tr>
<td>23 - 24</td>
<td>Beginning Wage</td>
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<tr>
<td>25 - 26</td>
<td>Present Wage</td>
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<tr>
<td>27 - 28</td>
<td>Maximum Wage</td>
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<tr>
<td>29 - 61</td>
<td>Agricultural Competencies</td>
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<tr>
<td>62</td>
<td>Other Agricultural Competencies</td>
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<tr>
<td>63</td>
<td>Educational Level</td>
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<tr>
<td>64</td>
<td>Residential Background</td>
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<tr>
<td>65</td>
<td>Farm Experience</td>
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<td>66</td>
<td>Professional</td>
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<td>67</td>
<td>Industrial</td>
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<td>68</td>
<td>Civil Service</td>
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<tr>
<td>69</td>
<td>Labor Law Restrictions</td>
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<td>70</td>
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<tr>
<td>71</td>
<td>Other Limitations</td>
</tr>
<tr>
<td>72</td>
<td>Your Firm</td>
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<td>On The Job</td>
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<td>Adult Education</td>
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<tr>
<td>78 - 80</td>
<td>Vocational Agricultural Education Form II</td>
</tr>
</tbody>
</table>
## APPENDIX C

### STATE SUMMARY—JOB TITLES

#### I. FARM MACHINERY SALES AND SERVICE

1. **Professional**
   - Irrigation Engineer
   - Asst. Irrigation Engineer
   - Designing Engineer
   - Asst. Designing Engineer
   - Research Engineer
   - Plant Research Engineer
   - Field Research Engineer
   - Asst. Plant Research Engineer
   - Asst. Field Research Engineer
   - Plant Production Engineer
   - Asst. Plant Production Engineer
   - Research Draftsman
   - Asst. Research Draftsman

2. **Technical**

3. **Managerial**
   - General Manager
   - Sales Manager
   - Business Manager
   - Parts Manager
   - Service Manager
   - Manager
   - Office Manager
   - Asst. General Manager
   - Asst. Manager
   - President
   - Asst. Parts Manager
   - Vice President
   - Truck Manager
   - Shop Manager
   - Used Car Manager
   - Credit Manager
   - Owner
   - Manager-Salesman
   - President
   - Manager-Salesman
   - V. President
   - Co-Owner
   - President-Research Engineer
   - V. Pres-Sales Manager
   - Asst. Sales Manager
   - Secretary-Treasurer
   - Owner-Manager-Salesman

4. **Supervisory**
   - Shop Foreman
   - Parts Foreman
   - Foreman-New Equipment
   - Foreman-Repairs
   - Foreman-Warehouse & Assembly
   - Shop Superintendent
   - Shop Supervisor
   - Demonstrator of Cane Equipment
   - Plant Production Foreman
   - Asst. Plant Production Foreman

5. **Sales**
   - Salesman
   - Sales Clerk
   - Truck Salesman
   - Parts Salesman
   - Manufacturer's Agent
   - Farm Equipment Salesman
   - Outside Salesman
   - Sales Representative
   - Stock Control Clerk
   - Shipping & Receiving Clerk
I. FARM MACHINERY SALES AND SERVICE (continued)

6. Office
  Clerk
  Bookkeeper
  Posting Clerk
  Office Secretary
  Office Helper
  Bookkeeper & Asst. Manager
  Office Clerk
  Accountant
  Secretary-Bookkeeper
  Asst. Bookkeeper
  Asst. Secretary

7. Skilled
  Mechanic
  Truck Mechanic
  Serviceman
  Tractor & Machine Mechanic
  Parts Man
  Farm Equipment Mechanic
  Welder
  Welder Repairman
  Painter
  Cotton Picker Mechanic
  Roving Mechanic
  Small Engine Repairman
  Mechanic & Partsman
  Service-Repairman
  Asst. Partsman
  Machinist
  Bodyman
  Mechanic & Truck Driver
  Drill Press Operator
  Fitter
  Welder-Painter

8. Semiskilled
  Truck Driver
  Mechanic Helper
  Warehouseman
  Assemblyman
  Shop Worker
  Welders Helper
  Pickup Man
  Deliveryman
  Setup & Deliveryman

9. Unskilled
  Porter
  Common laborer

II. FARM SUPPLIES AND EQUIPMENT

1. Professional
  Plant Breeder
  Engineer
  Horticulturist
  Forester
  Agronomist
  Nutritionist
  Pharmacist
  Entomologist

2. Technical
  Seed Analyser
  Herdsman
  Chemist
  Lumber Grader
  Pilot
  Chief Designer Engineer
  Mechanical Engineer
  Gin Electrician
  Field Technician
  Ammoniator

3. Managerial
  Manager
  Store Manager
  General Manager
  Treasurer
  Shop Manager
  Department Manager
  District Manager
  Horticulture Department Manager
II. FARM SUPPLIES AND EQUIPMENT (continued)

3. Managerial (cont.)

Division Manager
Plumbing & Welding Dept. Mgr.
Asst. Parts Manager
Personnel Manager
Branch Manager
Manager Trim Dept.
President
Secretary-Treasurer
Production Manager
Plant Dept. Manager
Division Manager
Service Manager
Plant Manager
Manager-Owner
Grocery Manager
Asst. Manager
Department Manager
Sales Manager
Farm Store Manager
Parts Manager
Manager Farm Department
Office Manager
Produce Manager
Market Manager
Vice President
Treasurer
Traffic Manager

General Manager, Co-Owner
Asst. Manager-Bookkeeper
Store Manager-Yard Foreman
Manager, Co-Owner-Clerk
Asst. Mgr., Co-Owner-Clerk
Office & Warehouse Manager
Owner Mgr.-Cotton Buyer
Co-Manager
Mill Manager
Poultry Operator Mgr.
Yard Manager
Asst. Yard Manager
President-Owner
Egg Plant Manager
Station Manager
Paint Dept Manager
Credit Manager
Farm Advertising Manager
Owner-Operator
Manager Bookkeeper
Elevator Manager
President-Manager
L. P. Gas Sales Manager
Firm Manager
Owner-General Manager
Warehouse Manager

4. Supervisory

Fertilizer Superintendent
Mill Foreman
Dept. Supervisor
Foreman, Supt.
Warehouse Supervisor
Yard Supt.
Mill Supt.
Warehouse Supt.
Shop Foreman
Erection Foreman
Asst. Plant Supt.
Woods Foreman
Superintendent
Plant Supervisor
Seed-Dryer Supervisor
Yard Foreman
Foreman
Wrecking Foreman
Planner Foreman
General Foreman

Shop Superintendent
Warehouse Foreman
Gin Repair Foreman
Carpentry Foreman
Scale Crew Foreman
Station Supervisor
District Supervisor
Service Supervisor
Plant Foreman
Fertilizer & Lime Supt.
Feed, Seed & Garden Supt.
Tool Dept. Supt.
Plant Superintendent
Production Foreman
Working Foreman
Broiler Serviceman
Feed Room & Mixer Foreman
Asst. Foreman
Crew Leader
## II. FARM SUPPLIES AND EQUIPMENT (continued)

### 5. Sales

- Salesman
- Sales Clerk
- Sales Lady
- Sales Girls
- Outside Salesman
- Telephone Salesman
- Purchasing Agent
- Sales Correspondent
- Inside Salesman
- Buyer
- Livestock Sales Consultant
- Farm Pharmaceutical Buyer
- Lumber Buyer

### Agricultural Supplies

- Agricultural Salesman
- Counterman
- Store Clerk
- Sales Representative
- Field Salesman & Service Man
- Commission Agent
- Clerk-Deliveryman
- Contact Salesman
- Secretary Treasurer & Clerk
- Gas Salesman
- Road Salesman
- Clerk Buyer
- Nursery Clerk
- Feed Buyer

### 6. Office

- Bookkeeper
- Chief Accountant
- Shipping Clerk
- Receiving Clerk
- Secretary-Treasurer
- Asst. Secretary
- Office Employees
- Service Clerk
- Secretary
- Clerk
- General Clerk

### Office Employees

- Accountant
- Stock Clerk
- Cashier
- Office Clerk
- Clerk-Secretary
- Clerk-Bookkeeper
- Posting Clerk
- Secretary & Bookkeeper
- Receiving & Shipping Clerk
- Asst. Bookkeeper

### 7. Skilled

- Mechanic
- Serviceman
- Operator
- Saddlemaker
- Welder
- Estimator
- Home Improvement Consultant
- Farm Service Man
- Plant Operator
- Mechanic Serviceman
- Sheet Metal Mechanic
- Butcher
- Engine Mechanic (Gin)
- Head Saw Cylinder Filer
- Parts Man
- Mixing Man

### Skilled Employees

- Tire Recapman
- Small Engine Mechanic
- Saw Mechanic
- Lathe Operator
- Miller
- Machinist
- Mix Operator
- Fork Lift Operator
- Packer Operator
- Elevator Operator
- Plumber (Farm)
- Carburetor Mechanic
- Pay Load Operator
- Packing Line Operator
- Feed Mixer
II. FARM SUPPLIES AND EQUIPMENT (continued)
8. Semiskilled
Produce Man           Gin Repair Crewman
Service Man           Butane Serviceman
Maintenance Man       Butane Transport Driver
Asst. Seed Dryer      Butane Delivery Man
Semiskilled Producers Egg Grader
Repairman             Fertilizer Plant Worker
Poultry Service Man   Maintenance Service Man
Truck Driver          Service & Repairman
Warehouseman          Assistant Butcher
Assembly Man          Millman
Deluxer               Production Helper
Sheet Metal Mechanics Helper General Helper
Asst. Warehouseman & Truck Driver
Electricians Helper
Engine Mechanics Helper
Saw Shop Crewman
Carpenter Crewman
Scale Repair Crewman

9. Unskilled
Porter                Delivery Man
Yardman               Driver's Helper
Laborer               Plant Helper
Warehouse Assistant   Service Station Attendant
Truck Helper          Stock Boy
Fence Erector         Dock Workers
Insulation Man

III. LIVESTOCK AND POULTRY
1. Professional
Bacteriologist        Hog Specialist

2. Technical
Field Man             Cattle Buyer
Inspector Grader      U.S.D.A. Inspector
Swine Expert          Auctioneer
Lab. Technician       Plant Engineer
Lab. Sample Checker   Ringman
Herdsman              D.H.I.A. Tester

3. Managerial
Plant Manager         Production Manager
President             Farm Manager
Manager               Marketing Manager
Asst. Manager         Produce Manager
Egg Dept. Manager     Market Manager
Killing Floor Manager Asst. Market Manager
Owner Manager         Frozen Food Manager
Beef Manager          Route Manager
III. LIVESTOCK AND POULTRY (continued)

3. Managerial (cont.)
   Asst. General Manager
   Retail Sales Manager
   Branch Manager
   Treasurer
   Procurement Manager
   Asst. Plant Manager
   Milk Production Manager
   Sales Manager
   Vice President
   Office Manager
   General Manager
   Southern Zone Manager
   Asst. Office Manager
   Egg Room Manager
   Dairy & Poultry Manager
   Personnel Manager
   Wholesale Manager
   Merchandise Manager
   Secretary-Treasurer
   Grocery Manager
   Store Manager
   Owner-Operator
   Manager-Bookkeeper
   Hatchery Manager
   Feed Mill Manager
   President-Manager
   Field Manager
   Processor & Sales Manager
   Owner Livestock Buyer
   Yard Manager
   Asst. Manager & Salesman
   Stock Manager
   Farm Flock Manager
   Co. Owner-Manager
   Office Manager-Bookkeeper
   Manager & Cattle Buyer
   Assistant Yard Manager
   Owner-Butcher

4. Supervisory
   General Plant Superintendent
   Plant Supervisor
   Supervisor
   Sales Supervisor
   Milk Plant Supt.
   Sausage Superintendent
   Dairy Manufacturing Supt
   Shipping Foreman
   Plant Foreman
   General Supervisor
   Foreman
   Shift Supervisor
   Processing Foreman
   Quality Control Supervisor
   Sales Supervisor
   Prod. Control Supervisor
   Dairy & Poultry Supt.
   Plant Supt.
   Wholesale Supt.
   Asst. Plant Supt
   Supervisor
   Department Supervisor
   Plant Production Supt.
   Manufacturing Supervisor
   Route Supervisor
   Ice Cream Plant Supt.
III. LIVESTOCK AND POULTRY (continued)

5. Sales

Salesman
Route Salesman
Purchasing Agent
Sales Lady
Beef, Lamb & Veal Salesman
Dairy & Poultry Salesman
Sales Clerk
Livestock Buyer
Merchandising Man
Routeman
Buyer
Sales Engineer
Outside Salesman

Precision Cut Salesman
Full Line Salesman
Merchandiser
Cattle Buyer
Hotel, Restaurant & Inst.
Salesman
Produce Clerk
Market Clerk
Wholesale Routeman
Baby Chick Salesman
Hide & Wool Buyer
Feed Salesman

6. Office

Bookkeeper
Shipping Clerk
Office Worker
Ticket Writer
Secretary
Auditor
Receiving Clerk
Clerical Help
Cashier
Clerical Clerk

Clerk
Weightmaster
Stock Clerk
Accountant
Scale Man
Stenographer-Clerk
Weightmaster-Ticket Writer
Bookkeeper-Clerk
Check writer

7. Skilled

Meat Cutter
Asst. Herdsman
Rendering Operator
Meat Boner
Livestock Handler
Stockman
Processor (Beef)
Carpenter
Ice Cream Maker
Asst. Operator
Milk Tester
Butcher
Pasteurizer Operator
Steak Cutter
Bone Cutter
Grader Packer

Processor
Smoker
Auctioneer
Cheese Maker
Slaughter-Butcher
Disease Control Man
Creamery Worker
Butcher-Meat Cutter
Processor (Dairy)
Electrician
Short Time Operator
Raw Milk Pickup Man
Milk Purification Operator
Sausage Maker
Assorted & Inspector

8. Semiskilled

Maintenance Man
Milker
Cooler Man
Warehouseman
Plant Worker
Ring Man

Egg Candler
Service Man
Mixer Man
Laborer
Groundsman
Delivery Man
III. LIVESTOCK AND POULTRY (continued)

8. Semiskilled (cont.)

- Sausage Maker
- Butcher's Helper
- Poultry Processors
- Curer
- Slaughterer
- Processor
- Yardman
- Slaughterer, Packer & Peeler
- Truck Driver
- Order Packer
- Grader
- Candler & Grader
- Weight Master
- Sales Driver
- Load-Out-Man
- Produce Helper
- Meat Wrapper
- Packer (Dairy)
- Stock Man
- Egg Room Operator
- Farm Operator
- Trimmer
- Hatching Egg Handler
- Routeman's Helper
- Cattle Herder
- Egg Packer
- Sorter & Checker
- Egg Processor
- Weight Man

IV. CROPS, FORESTRY AND SOIL CONSERVATION

1. Professional

- State Forester
- Forester V
- Forester III
- Forester I
- Water Management Researcher
- Biochemist
- Director of Research
- Service Forester
- Range Researcher
- Asst. Engineer
- Asst. Forester
- Federal Inspector
- District Forest Supt.
- District Ranger
- Research Forester
- Soil Scientist
- Entomologist
- Plant Physiologist
- Asst. State Forester
- Forester IV
- Timber Management Researcher
- Wildlife Researcher
- Agronomist
- Public Relations
- Forester II
- Engineer
- Chemist
- Work Unit Conservationist
- Tropical Research Director
- Area Forest Supt.
- Unit Forester
- Agri-Commodity Supervisor
- Range Conservationist
- Asst. District Forester
- District Forester
- Forester
- Chief Forester
- Area Forester
- Forest Specialist
- Agricultural Engineer

2. Technical

- Electrician
- Investigator III
- Car Inspector
- Asst. Engineer
- Forest Technician
- Forest Ranger
- Candlers
- Inspector
- Tree Surgeon
- Enforcement Agent
- Lumber Inspector
- Farm Planner
- Quality Control Man
- Engineers Aid
- Cotton Mkt. Spec. Fieldman
- Cotton Classer
IV. CROPS, FORESTRY AND SOIL CONSERVATION (continued)

2. Technical (cont.)

Radio Technician
Technical Expert
Investigator II
Engineer
Chemist
Treating Technician
Graders

Cane Inspector
Practical Forester
Forestry Aid
Chief Engineer
Surveyor
Plant Engineer

3. Managerial

Manager Agriculture Dept.
General Sugar Mill Manager
Assistant Manager
Elevator Manager
Secretary-Treasurer
President
Field Manager
Business Manager
Production Manager
Gin Manager
Egg Farm Manager
Meat Manager
Forestry Manager
Land Manager
Transportation Manager
Truck Manager
General Field Manager
Manager
Traffic Manager
Executive Vice-President
Office Manager
Vice-President
Store Manager
General Manager
Plant Manager
Poultry Manager
Sales Manager
Produce Manager
Market Manager
Export Manager
Banana Department Manager
Egg Room Manager
Sec., Treas., Gen. Mgr. & Cotton Buyer

General Manager-Cotton Buyer
Owner Manager
President-Co-Owner
Market Coordinator
President, General Manager
Secretary-Treasurer & Manager
Assistant Market Manager
Assistant Produce Manager
Planner Mill Manager
Assistant Store Manager
Co-Manager & Co-Owner
Manager Salesman
Manager Operator
Vice President Land Manager
Insurance Manager
Warehouse Manager
Feed Mill Manager
Grain Storage Manager
Trucks Manager
Fertilizer Manager
Assistant Office Manager
Manager President
Assistant Sales Manager
Owner
President Manager
Vice President-Assistant Manager
Vice President-General Manager
Secretary-Treasurer & Office Manager
Canal Manager
Drier Manager
Comptroller
Office Manager & Cotton Buyer
Territorial Manager

4. Supervisory

Foreman
Foreman III
Fabrication Superintendent
Assistant Superintendent
Erection Foreman
Superintendent Oil Mill

General Shipping Supervisor
Plant Foreman
Farm Superintendent
Wood Procurement Superintendent
Warehouse Superintendent
Foreman Lint Room
IV. CROPS, FORESTRY AND SOIL CONSERVATION (continued)

4. Supervisory (cont.)

<table>
<thead>
<tr>
<th>Plant Supervisor</th>
<th>Herdsman Foreman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Control Supt.</td>
<td>Field Overseer</td>
</tr>
<tr>
<td>Wood Marketing Foreman</td>
<td>Supervisor Transportation</td>
</tr>
<tr>
<td>Warehouse Foreman</td>
<td>Tree Nursery Supt. II</td>
</tr>
<tr>
<td>Tree Surgeon Foreman</td>
<td>Gin Superintendent</td>
</tr>
<tr>
<td>Head Forestry Dept.</td>
<td>Plant Superintendent</td>
</tr>
<tr>
<td>Supervisor Warehouse</td>
<td>Repair Shop Foreman</td>
</tr>
<tr>
<td>Tree Nursery Supt. I</td>
<td>Elevation Supt.</td>
</tr>
<tr>
<td>Wood Yard Foreman</td>
<td>Logging Foreman</td>
</tr>
<tr>
<td>Mill Superintendent</td>
<td>Compress Superintendent</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Compress Asst. Supt. &amp; Press Foreman</td>
</tr>
<tr>
<td>General Supt. of Mills</td>
<td>Compress Labor Foreman</td>
</tr>
<tr>
<td>Yard Foreman</td>
<td>Woods Foreman</td>
</tr>
<tr>
<td>Foreman II</td>
<td>Mill Foreman</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Planer Mill Foreman</td>
</tr>
<tr>
<td>Superintendent</td>
<td>Cross Tie Superintendent</td>
</tr>
<tr>
<td>Production Plant Supt.</td>
<td>Shed Foreman</td>
</tr>
<tr>
<td>Asst. Shed Foreman</td>
<td>Pulpwood Superintendent</td>
</tr>
<tr>
<td>Factory Superintendent</td>
<td>Green End Foreman</td>
</tr>
<tr>
<td>Shed Supervisor</td>
<td>Logging Superintendent</td>
</tr>
<tr>
<td>Assistant Shed Supervisor</td>
<td>Department Superintendent</td>
</tr>
<tr>
<td>Cresote Plant Superintendent</td>
<td>Millwright Foreman</td>
</tr>
<tr>
<td>Asst. Cresote Plant Supt.</td>
<td>Log Contractor</td>
</tr>
<tr>
<td>Field Foreman</td>
<td>Shop Foreman</td>
</tr>
<tr>
<td>Asst. Woods Foreman &amp; Truck Driver</td>
<td>Production Foreman</td>
</tr>
<tr>
<td>Const. &amp; Maint. Supt.</td>
<td>Production Supervisor</td>
</tr>
<tr>
<td>General Foreman of Roads &amp; Grounds</td>
<td>Line Supervisor</td>
</tr>
<tr>
<td></td>
<td>Dry Kiln Foreman</td>
</tr>
<tr>
<td></td>
<td>Shipping Foreman</td>
</tr>
</tbody>
</table>

5. Sales

| Salesman | Cane Buyer |
| Buyer | Sweet Potatoe Buyer |
| Sales Representative | Rice Buyer-Grader |
| Food Clerk | Timber Buyer |
| Broker | Pole Buyer |
| Trader | Rice Buyer |
| Merchant | Seed Buyer |
| Dairy Clerk | Sales Clerk |
| Produce Clerk | Cotton Buyer |
| Agroundeer | Sales Manager |

6. Office

| Time Keeper | Grain Checker & Weigher |
| Clerk | Admin. Officer |
| Chief Clerk | Asst. Shipping Clerk |
| Seed Checker & Weigher | Shipping Clerk & Bookkeeper |
| Shipping Clerk | Shed Clerk |
| Secretary-Treasurer | Clerk Weigher |
| Cashier | Weigher & Bookkeeper |
IV. CROPS, FORESTRY AND SOIL CONSERVATION (continued)

6. Office (cont.)

<table>
<thead>
<tr>
<th>Position</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typist-Clerk</td>
<td>Ticketman &amp; Cotton Weigher</td>
</tr>
<tr>
<td>Cane Weigher</td>
<td>Recorder Clerk</td>
</tr>
<tr>
<td>Payroll Clerk</td>
<td>Bookkeeper &amp; Sample Man</td>
</tr>
<tr>
<td>Office Worker</td>
<td>Asst. Bookkeeper</td>
</tr>
<tr>
<td>Secretary</td>
<td>Shipping Clerk</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>Accountant</td>
</tr>
<tr>
<td>Office &amp; Shipping Clerk</td>
<td>Invoice Clerk</td>
</tr>
<tr>
<td>Weigher</td>
<td>Clerk &amp; Warehouseman</td>
</tr>
<tr>
<td>Receipt Writer</td>
<td>General Clerk</td>
</tr>
<tr>
<td>Check Writer</td>
<td>Shipping &amp; Storing Clerk</td>
</tr>
</tbody>
</table>

7. Skilled

<table>
<thead>
<tr>
<th>Position</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavity Man</td>
<td>Treating Engineer</td>
</tr>
<tr>
<td>Derrick Operator</td>
<td>Loader Operator</td>
</tr>
<tr>
<td>Sugar Boiler</td>
<td>Gang Sawyer</td>
</tr>
<tr>
<td>Forest Ranger I</td>
<td>Saw Filer</td>
</tr>
<tr>
<td>Forest Ranger II</td>
<td>Kiln Operator</td>
</tr>
<tr>
<td>Forest Ranger III</td>
<td>Shop Mechanic</td>
</tr>
<tr>
<td>Cabinet Maker</td>
<td>Machine Man (Planer Mill)</td>
</tr>
<tr>
<td>Heavy Equipment Operator</td>
<td>Machine Feeder</td>
</tr>
<tr>
<td>Egg Candler</td>
<td>Lumber Grader</td>
</tr>
<tr>
<td>Forest Ranger</td>
<td>Lumber Checker</td>
</tr>
<tr>
<td>Partsman</td>
<td>Sawyer &amp; Filer</td>
</tr>
<tr>
<td>Ginner</td>
<td>Planer Machine Operator &amp; Mechanic</td>
</tr>
<tr>
<td>Press Operator</td>
<td>Maintenance Man</td>
</tr>
<tr>
<td>Meat Cutter</td>
<td>Okra Slicer Operator</td>
</tr>
<tr>
<td>Butcher</td>
<td>Timber Market Estimator</td>
</tr>
<tr>
<td>Draftsman</td>
<td>Rice Dryer Operator</td>
</tr>
<tr>
<td>Trimmer</td>
<td>Syrup Mill Operator</td>
</tr>
<tr>
<td>Refinery Mechanic</td>
<td>Grain Inspector</td>
</tr>
<tr>
<td>Clarifier Operator</td>
<td>Fireman</td>
</tr>
<tr>
<td>Mechanic</td>
<td>Hydrofunic House Worker</td>
</tr>
<tr>
<td>Gin Operator</td>
<td>Lathe Operator</td>
</tr>
<tr>
<td>Standman</td>
<td>Verneer Clipper Operator</td>
</tr>
<tr>
<td>Forest Foreman</td>
<td>Splicer Operator</td>
</tr>
<tr>
<td>Radio Operator</td>
<td>Dry Kiln Operator</td>
</tr>
<tr>
<td>Fill Operator</td>
<td>Veneer Breaker</td>
</tr>
<tr>
<td>Carpenter</td>
<td>Power Saw Operator</td>
</tr>
<tr>
<td>Welder</td>
<td>Gin Mechanic</td>
</tr>
<tr>
<td>Lookout Man</td>
<td>Log Skidder</td>
</tr>
<tr>
<td>Ranger</td>
<td>Tow Motor Operator</td>
</tr>
<tr>
<td>Electrician</td>
<td>Millwright &amp; Sawryer</td>
</tr>
<tr>
<td>Horse Trainer</td>
<td>Lumber Setter</td>
</tr>
<tr>
<td>Presser</td>
<td>Plywood Grader</td>
</tr>
<tr>
<td>Edgeman</td>
<td>Crane Operator</td>
</tr>
<tr>
<td>Millwright</td>
<td>Machinist</td>
</tr>
<tr>
<td>Sawyer</td>
<td>Welder Mechanic</td>
</tr>
<tr>
<td>Cutup Man</td>
<td>Process Inspector</td>
</tr>
<tr>
<td>Sheet Metal Mechanic</td>
<td>Field Man (Agricultural)</td>
</tr>
<tr>
<td>Box Setter</td>
<td>Head Miller</td>
</tr>
<tr>
<td>Weigher</td>
<td>Bin Man</td>
</tr>
<tr>
<td>Maintenance Man</td>
<td>Receiver-Shipper (Rice Dryer)</td>
</tr>
<tr>
<td>Loader Operator and Wood Scaler</td>
<td></td>
</tr>
</tbody>
</table>

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IV. CROPS, FORESTRY AND SOIL CONSERVATION (continued)

8. Semiskilled

Climber
Forest Foreman I
Forest Foreman II
Forest Foreman III
Tractor Operator
Forest Fireman
Maintenance Helper
Poultry Processor
Lift Truck Operator
Log Scaler
Welder Helper
Mill Employees
Gin Stand Worker
Candler
Horse Training Helper
Truck Driver
Forest Towerman I
Forest Towerman II
Fire Guard
Packer-Shipper
Forest Towerman
Tree Trimmer
Feed Miller
Crawler Driver
Asst. Ginner
Warehouseman
Tower Man II
Weigher
Pumper
Crew Leader
Utility Man
Seed Weigher
Elevator Operator
Skidway Man
Tractor Driver & Loader
Scaleman
Blower
T.S.I. Crewman
Fork Lift Operator
Mill Laborer
Asst. Dryer Operator
Oilers
Miller Maintenance

Feed Mill Operator
Seed Cleaner & Delinter Operator
Cane Grinder
Cane Juice Carrier
Cane Juice Drainer
Skimmer
Syrup Cooker & Fireman
Pole & Pile Peeler
Scaler Helper
Mechanic Helper
Laborer
Saw Filer Helper
Log Lifter
Debarker Operator
Fireman
Press Crew Worker
Carman
Laborer Utility
Chipper Operator
Resaw Operator
Handy Man
Grader-Packer
Grader
Meat Wrapper
Relief Man
Commodity Aids
Bench Saw Operator
Plane Operator
Lumber Handler
Forester Aid
Cotton Sample Weigher
Edger
Log Tripper
Peach Packer
Cane Sampler
Operators Helper
Deliveryman
Road Maintenance Crew Laborer
Sawman
Asst. Miller
Packing Crew
Canal Walkers

9. Unskilled

Groundsman
Yardman
Block Setter
Trade Helper
Field Worker
Cotton Picker (hand)
Suction Feeder
Syrup Mill Worker
Produce Trimmer
Pulp Loader

Woods Crew
Warehouseman
Laborer
Porter
Yard Laborer
Tree Planter
Feed Mill & Grain Elevator Worker
Weeder-Grader
Cotton Loader
V. ORNAMENTAL HORTICULTURE

1. Professional
   Landscape Architect
   Entomologist
   Landscape Draftsman
   Landscape Specialist

2. Technical
   Florist

3. Managerial
   Manager
   Nursery Manager
   Asst. Manager Retail Sales
   Small House Plant Manager
   Office Manager
   Sales Manager
   President
   Asst. Manager
   Manager Retail Sales
   Manager Chem. & Fert. Dept.
   Nursery Stock & Trees Manager
   Nursery Farm Manager
   Sales Lot Manager
   Owner-Manager
   Vice President
   Manager Grower
   Co-Manager & Owner

4. Supervisory
   Foreman
   Nursery Foreman
   Landscape Foreman
   Field Foreman
   Job Foreman
   Sales Supervisor
   Supervisor
   Greenhouse Foreman
   Lot & Landscape Foreman
   Plant Supervisor

5. Sales
   Salesman
   Dispatcher
   Lot Salesman
   Sales Clerk
   Landscape Salesman
   Designer Salesman

6. Office
   Clerk
   Bookkeeper
   Secretary-Treasurer
   Office Worker
   Telephone Clerk

7. Skilled
   Floral Designer
   Propagator
   Designer
   Mechanic
   Asst. Designer
   Flower Arranger
   Asst. Floral Designer
   Tree Surgeon
   Budder-Cutter

8. Semiskilled
   Potter
   Planter
   Grower
   Tractor Driver
   Apprentice Designer
   Nurseryman
   Truck Driver
   Landscape Gardener
   Serviceman
   Digger
   Pinner
   Florist Helper
   Tree Surgeons Helper
9. Unskilled
   Laborer
   Yard Boy
   Apprentice
   Landscape Laborer
   Greenhouse Attendant
   Stable Workman

   Delivery Boy
   Gardener
   Nursery Helper
   Yardman
   Potter

VI. WILDLIFE AND RECREATION
1. Professional
   Curator
   Horticulturist
   Biologist
   Commissioner

   Wildlife Biologist
   Research & Educational Personnel
   Fish Biologist

2. Technical
   Biologist Aid

   Waste Disposal Inspector

3. Managerial
   Manager
   Asst. Superintendent
   Asst. Manager
   General Manager
   Superintendent
   Park Superintendent

   Golf Course Manager
   Wildlife Manager
   Refuge Manager
   Owner-Manager
   Asst. Manager & Salesman

4. Supervisory
   Park Ranger
   Superintendent
   Asst. Superintendent
   Tree Supervisor
   Supervisor
   Golf Course Superintendent
   Area Supervisor
   Foreman
   Greens Supt.
   Landscape Supervisor

   Parkway Foreman
   Recreation Area Supervisor
   Fishery Foreman
   Wildlife Agent
   Area Supervisor
   District Supervisor
   Game Warden
   Supt. of Parks & Recreation
   Park Supervisor
   Refuge Supervisor

5. Sales

6. Office
   Refuge Clerk

7. Skilled
   Taxidermist
   Operator
   Chief Greenskeeper

   Mechanic
   Bulldozer Operator
   Heavy Equipment Operator

8. Semiskilled
   Maintenance Man
   Gardener
   Asst. Greenskeeper
   Equipment Operator

   Greenskeeper
   Truck Driver
   Minnow Feeder
   Fish Farm Helper
VI. WILDLIFE AND RECREATION (continued)

9. Unskilled

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Attendant</td>
<td>Golf Course Employee</td>
</tr>
<tr>
<td>Groundskeeper</td>
<td>Laborer</td>
</tr>
<tr>
<td>Fairway Keeper</td>
<td>Caretaker</td>
</tr>
<tr>
<td>Asst. Greenskeeper</td>
<td>Seine Man</td>
</tr>
</tbody>
</table>

VII. FARM SERVICE

1. Professional

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineer</td>
<td>Home Service Advisor</td>
</tr>
<tr>
<td>Chemist Bacteriologist</td>
<td>Executive Secretary</td>
</tr>
<tr>
<td>Public Relations</td>
<td>Work Unit Supervisor</td>
</tr>
<tr>
<td>Farm News Director</td>
<td>Entomologist</td>
</tr>
<tr>
<td>FHA Supervisor</td>
<td>Administration Officer</td>
</tr>
<tr>
<td>Agri. Engineer</td>
<td>Loan Specialist</td>
</tr>
<tr>
<td>State Director Engineer</td>
<td>Farm Management Officer</td>
</tr>
<tr>
<td>Asst. Loan Specialist</td>
<td>Loan Officer</td>
</tr>
<tr>
<td>Home Economist</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Radio Farm Director</td>
<td>Agri. Advisor</td>
</tr>
<tr>
<td>Farm Management Supervisor</td>
<td>Appraiser</td>
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<tr>
<td>Field Engineer</td>
<td>Home Service Engineer</td>
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<tr>
<td>Research Director</td>
<td>Asst. County Supervisor</td>
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<tr>
<td>County Supervisor</td>
<td>Electrical Engineer</td>
</tr>
<tr>
<td></td>
<td>District Sales Manager</td>
</tr>
</tbody>
</table>

2. Technical

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Asst</td>
<td>Pilot</td>
</tr>
<tr>
<td>Service Technician</td>
<td>Survey Asst.</td>
</tr>
<tr>
<td>Pest Control Technician</td>
<td>Advisor</td>
</tr>
<tr>
<td>Management Technician</td>
<td>Draftsman</td>
</tr>
<tr>
<td>Milk Technician</td>
<td>Sanitarian</td>
</tr>
<tr>
<td>Inspector</td>
<td>Radio Breaker &amp; Utility Maint. Man</td>
</tr>
<tr>
<td>Livestock Board Inspector</td>
<td>Meter &amp; Utility Maint. Man</td>
</tr>
<tr>
<td>Airplane Pilot</td>
<td>Artificial Inseminator</td>
</tr>
<tr>
<td>Plant Cover Technician</td>
<td>Breeding Technician</td>
</tr>
</tbody>
</table>

3. Managerial

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>Credit Manager</td>
</tr>
<tr>
<td>Asst. Manager</td>
<td>Manager Operator</td>
</tr>
<tr>
<td>Sales Manager</td>
<td>Owner Asst Manager</td>
</tr>
<tr>
<td>Branch Manager</td>
<td>Asst. Branch Manager</td>
</tr>
<tr>
<td>Vice President</td>
<td>Office Manager &amp; Secretary Treasurer</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Farm Loan Manager</td>
</tr>
<tr>
<td>Pest Control Division Manager</td>
<td>Manager Pilot</td>
</tr>
<tr>
<td>Secretary-Treasurer</td>
<td>Manager Welder</td>
</tr>
<tr>
<td>President</td>
<td>Treasurer-Office Manager</td>
</tr>
<tr>
<td>Division Manager</td>
<td>Manager Mechanic</td>
</tr>
<tr>
<td>General Manager</td>
<td>Co. Manager</td>
</tr>
<tr>
<td>District Manager</td>
<td>Asst. Manager Accountant</td>
</tr>
<tr>
<td>Office Manager</td>
<td>President &amp; Manager</td>
</tr>
<tr>
<td>Termite Division Manager</td>
<td>Manager &amp; Insurance Agent</td>
</tr>
</tbody>
</table>
### VII. FARM SERVICE (continued)

#### 3. Managerial (cont.)
- Regional Manager
- Owner-Manager
- Plant Manager
- **Engineer Manager**
- **Agency Manager**

#### 4. Supervisory
- Supervisor
- Shop Foreman
- Pest Control Supervisor
- Machinist Foreman
- Foreman
- Termite Dept. Head
- Field Supt.
- Installation Supervisor
- Line Supt.
- Service Supervisor
- Irrigation Supervisor
- **Plant Supervisor**
- **Spray Supervisor**
- **Asst. County Supervisor**
- **Field Representative**
- **Enforcement Agent**
- **Construction Line Foreman**
- **Business Supervisor**
- **District Supervisor**
- **Termite Supervisor**
- **Performance Supervisor**
- **Asst. Shop Foreman**

#### 5. Sales
- Salesman
- Real Estate Agent
- Advertising Salesman
- Routeman
- Insurance Salesman
- **Service Agent**
- **Counter Salesman**
- **Purchasing Agent**
- **Power Use Manager & Public Rel.**

#### 6. Office
- Office Worker
- Chief Brand Clerk
- Office Clerk
- Office Asst.
- Secretary
- Bookkeeper
- Clerk
- Clerical Asst.
- Office Secretary
- Clerk-Secretary
- Stock Clerk
- Checker
- Treasurer
- Asst. Cashier
- **Cashier**
- **Shipping Clerk**
- **Bookkeeper-Dispatcher**
- **Steno-Clerk**
- **Accountant II, Transportation Clerk**
- **Work Order Clerk**
- **Warehouse Clerk**
- **Accountant I**
- **Accountant III-Billing Clerk**
- **Asst. Bookkeeper**
- **Secretary-Bookkeeper**
- **Dispatcher**
- **Claims Adjuster**

#### 7. Skilled
- Operators
- Mechanic
- General Pest Treater
- Machinist
- Well Serviceman
- Welding Operator
- Truck Press Operator
- Blacksmith
- Serviceman
- Carpenter
- **Tree Surgeon**
- **Reporters**
- **Gin Repairman**
- **Bulldozer Operator**
- **Construction Lineman**
- **Electrician**
- **Plumber**
- **Engineer**
- **Dragline Operator**
- **Sheet Metal Mechanic**

---

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VII. FARM SERVICE (continued)

7. Skilled (cont.)

<table>
<thead>
<tr>
<th>Lineman</th>
<th>Appliance Mechanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Operator</td>
<td>Machinest-Welder</td>
</tr>
<tr>
<td>Welder</td>
<td>Cement Batch Operator</td>
</tr>
<tr>
<td>Well Driller</td>
<td>Heavy Equipment Operator</td>
</tr>
<tr>
<td>Driller</td>
<td></td>
</tr>
</tbody>
</table>

8. Semiskilled

<table>
<thead>
<tr>
<th>Treater</th>
<th>Hay Crewman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pest Control Service Man</td>
<td>Applicator</td>
</tr>
<tr>
<td>Termite Service Man</td>
<td>Tractor Operator</td>
</tr>
<tr>
<td>Welder Helper</td>
<td>Spreader Operator</td>
</tr>
<tr>
<td>Well Driller Helper</td>
<td>Caretaker</td>
</tr>
<tr>
<td>Machinist Helper</td>
<td>Canal Walker</td>
</tr>
<tr>
<td>Termite Treater</td>
<td>Mill Operator</td>
</tr>
<tr>
<td>Fieldman</td>
<td>Tree Pruner</td>
</tr>
<tr>
<td>Tool Room Man</td>
<td>Carpenters Helper</td>
</tr>
<tr>
<td>Treater Helper</td>
<td>Meter Reader</td>
</tr>
<tr>
<td>Exterminator</td>
<td>Form Setter</td>
</tr>
<tr>
<td>Warehouseman</td>
<td>Finisher</td>
</tr>
<tr>
<td>Scout II</td>
<td>Loader-Driver</td>
</tr>
<tr>
<td>Painter</td>
<td>Floor Hand</td>
</tr>
<tr>
<td>Ground Crew</td>
<td>Mechanics Helper</td>
</tr>
<tr>
<td>Asst. Exterminator</td>
<td>Apprentice Machinist</td>
</tr>
<tr>
<td>Termite Control Man</td>
<td>Tree Climber</td>
</tr>
</tbody>
</table>

9. Unskilled

<table>
<thead>
<tr>
<th>Warehouse Helper</th>
<th>Service Asst.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Man</td>
<td>Electricians Helper</td>
</tr>
<tr>
<td>Laborer</td>
<td>Plumbers Helper</td>
</tr>
<tr>
<td>Lineman Helper</td>
<td>Sheet Metal Helper</td>
</tr>
<tr>
<td>General Helper</td>
<td>Truck Drivers Helper</td>
</tr>
</tbody>
</table>

VIII. AGRICULTURAL SERVICE

1. Professional

<table>
<thead>
<tr>
<th>Research Agronomist</th>
<th>Asst. Commissioner of Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Agriculture Teacher</td>
<td>Asst. DirectorWeights &amp; Measures</td>
</tr>
<tr>
<td>Specialist</td>
<td>Director Sweet Potatoe Advertising</td>
</tr>
<tr>
<td>Executive Assistant II</td>
<td>Plant Entomologist</td>
</tr>
<tr>
<td>Chief Anhydrous Ammonia Div.</td>
<td>State Entomologist</td>
</tr>
<tr>
<td>Director Weights &amp; Measures</td>
<td>Veterinary Pathologist</td>
</tr>
<tr>
<td>Exec. Asst. Dept. of Agriculture</td>
<td>Pest Control State Superintendent</td>
</tr>
<tr>
<td>Dir. Warehouse Commission</td>
<td></td>
</tr>
<tr>
<td>Veterinarian</td>
<td>County Agent</td>
</tr>
<tr>
<td>Poultry Pathologist</td>
<td>Assoc. County Agent</td>
</tr>
<tr>
<td>Pest Control Dist. Super.</td>
<td>Agri. Marketing District</td>
</tr>
<tr>
<td>Asst. County Agent</td>
<td>State Dir. Voc. Agri. Education</td>
</tr>
<tr>
<td>Agri. Marketing Ser. Area</td>
<td>Professor of Agronomy</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Assoc. Prof. Animal Science</td>
</tr>
</tbody>
</table>

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VIII. AGRICULTURAL SERVICE (continued)

1. Professional (cont)

Chairman Agriculture Dept.
Assoc. Prof. Ag. Engineering
Dir. Agri. Research Service
Chemical Engineer
Research Forester
Forester
Party Leader
Hydraulic Engineer
Entomologist
Counselor
Research Plant Pathologist
Hon. Demonstration Agent
Agronomist
Livestock Director
Home Economics Teacher
Asst. Prof. of Horticulture
Assoc. Prof. of Horticulture
Asst. Prof. Poultry Science
State Admin. Officer
Agri. Engineer
Biologist
Asst. Agronomist
County Office Manager
Voc. Agri. Supervisor
Land Administrator II

Soil Scientist
County Manager
Agri. Economist
Geologist
Senior Counselor
Instructor
Chemist
Asst. Home Demonstration Agent
Animal Husbandry Man
Conservationist
Assoc. Prof. Dairy Science
Assoc. Home Demonstration Agent
Prof. of Horticulture
Forestry Consultant
Soil Conservationist
Civil Engineer
Work Unit Conservationist
Station Superintendent
Assoc. Prof. Agronomy

(In charge of Experiment Station)

2. Technical

Pest Control Technician
Veterinary Nurse
Livestock Inspector General
Sweet Potatoe Inspector
Milk Sampler & Weigher
Marketing Specialist
Anhydrous Ammonia Inspector
Herbicide Inspector
Junior Livestock Loan Field Representative
Cotton Gin Specialist
Exhibit Technician
Soil Conservation Technician
Warehouse Examiner
Field Representative
Jr. Credit Examiner
Poultry Product Insp.
Fresh Fruit & Veg. Insp.
Pest Control Inspector
Draftsman
Civil Engineering Technician
Milk Technician

Grain Inspector
State Seed Analysis
Pest Controller
Soil Conservation Aid
Fats & Oil Specialist
Claim Specialist
Credit Examiner
Inspector
Poultry Grader
Horticulture Inspector
Pink Boll Worm Inspector
Conservation Technician
Agri. Research Technician
Cotton Market Specialist
Pink Boll Worm Quarantine Insp.
Customer Service Representative
Agri. Engineering Aid
New Business Representative
Districts Supervisors Aid
Asst. Forester
Soil Conservation Aid
Computer
VIII. AGRICULTURAL SERVICE (continued)

2. Technical (cont.)

Employment Security Tech. 
Produce Inspector 
Animal Disease Enforcement Officer 
Livestock Inspector 
Warehouse Examiner 
Feed & Fertilizer Inspector

Research Aid 
Engineering Aid 
Farm Planner 
Field Inspector 
Apiary Inspector 
Weight & Measure Inspector 
Seed Technician

3. Managerial

Trust Officer 
President 
Loan Officer 
Asst. Manager Livestock Loan Department 
Manager 
Office Manager 
Secretary-Treasurer 
Senior Officer 
Administrator 
Senior Vice President 
Asst. Vice President 
Administration Officer 
Vice President 
Manager Livestock Loan Dept. 
Asst. Administration Officer 
Manager Agricultural Loans

County Office Manager 
Department Manager 
Storage Management Officer 
Officer in Charge 
Business Analysis 
District Manager 
Manager & Fieldman 
Executive Vice President 
Sales Manager 
Asst. Manager 
Owner Manager 
Branch Manager 
Asst. Office Manager 
Equipment Manager 
Asst. Cashier, Manager

4. Supervisory

Work Unit Supervisor 
Fire Ant Supervisor 
Farm Superintendent II 
Area Supervisor 
Field Supt. 
Gulf Region Supervisor 
Horticulture Foreman 
Poultry Production Supervisor 
Supervisor 
Employment Security Supervisor 
Performance Supervisor 
Farm Supervisor 
Horticulture Supervisor 
Service Crew Foreman

County Supervisor 
Farm Loan Supervisor 
Dist. Fieldman 
Field Supervisor 
Field Representative 
Asst. County Supervisor 
Farm & Lab. Supervisor 
Milk Technician Supervisor 
Party Leader 
Dist. Supervisor 
Agric. Commodity Grader Super. 
Asst. Farm Foreman 
Superintendent

5. Sales

Liaison Officer 
Salesman 
Market & Produce Buyer

Merchants 
Routeman
### VIII. AGRICULTURAL SERVICE (continued)

#### 6. Office

<table>
<thead>
<tr>
<th>Position</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td>Stenographer</td>
</tr>
<tr>
<td>Clerk Typist</td>
<td>Conservation Program Clerk</td>
</tr>
<tr>
<td>Note Teller</td>
<td>Soil Bank Clerk</td>
</tr>
<tr>
<td>Milk Plant Auditor</td>
<td>Bookkeeper</td>
</tr>
<tr>
<td>Collector</td>
<td>County Office Clerk</td>
</tr>
<tr>
<td>Area Clerk</td>
<td>Agri. Conser. Program Clerk</td>
</tr>
<tr>
<td>Investigator</td>
<td>Cashier</td>
</tr>
<tr>
<td>Program Clerk</td>
<td>Admin. Price Support Clerk</td>
</tr>
<tr>
<td>Allotment Program Clerk</td>
<td>Clerk IV</td>
</tr>
<tr>
<td>Counter Clerk</td>
<td>Agri. Statistician</td>
</tr>
<tr>
<td>Administrative Clerk</td>
<td>Appraisers</td>
</tr>
<tr>
<td>Receptionist</td>
<td>Sugar Clerk</td>
</tr>
<tr>
<td>Sugar Feed Grain Clerk</td>
<td>General Clerk</td>
</tr>
<tr>
<td>Acreage Allotment Clerk</td>
<td>Extension Secretary</td>
</tr>
<tr>
<td>Grain Market Reporter</td>
<td>Filing Clerk</td>
</tr>
<tr>
<td>Milk Auditor</td>
<td>Cotton Loan Clerk</td>
</tr>
<tr>
<td>Credit Examiner</td>
<td>Performance Clerk</td>
</tr>
<tr>
<td>Clerk</td>
<td>Allotment &amp; Marketing Quota Clerk</td>
</tr>
<tr>
<td>Asst. Cashier</td>
<td>C. A. &amp; M. 2 Clerk</td>
</tr>
<tr>
<td>Auditor</td>
<td>Note Teller &amp; Bookkeeper</td>
</tr>
<tr>
<td>Chief Clerk</td>
<td>Asst. County Office Clerk</td>
</tr>
<tr>
<td>Interviewer</td>
<td>Stock Clerk &amp; Warehouseman</td>
</tr>
<tr>
<td>Farm Commodity Market Reporter</td>
<td>Office Assistant</td>
</tr>
</tbody>
</table>

#### 7. Skilled

<table>
<thead>
<tr>
<th>Position</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Mechanic</td>
<td>Farm Mechanic</td>
</tr>
<tr>
<td>Plainometer Operator</td>
<td>Equipment Operator</td>
</tr>
<tr>
<td>Surveyor</td>
<td>Asst. Farm Mechanic</td>
</tr>
<tr>
<td>Field Reporter</td>
<td>Heavy Machine Operator</td>
</tr>
<tr>
<td>Service Crewman</td>
<td>Industrial Service Operator</td>
</tr>
<tr>
<td>State Cooperator</td>
<td>Asst. to Engineering Aid</td>
</tr>
</tbody>
</table>

#### 8. Semiskilled

<table>
<thead>
<tr>
<th>Position</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinarian Helper</td>
<td>Plumbers Helper</td>
</tr>
<tr>
<td>Plant Pest Control Worker</td>
<td>Farm Laborer</td>
</tr>
<tr>
<td>Veterinarian Asst.</td>
<td>Dairy Laborer</td>
</tr>
<tr>
<td>Kennel Helper</td>
<td>Student Farm Laborer</td>
</tr>
<tr>
<td>Fire Ant Control Worker</td>
<td>Research Helper</td>
</tr>
<tr>
<td>Grader</td>
<td>Pest Control Asst.</td>
</tr>
<tr>
<td>District Aid</td>
<td>Parts Man</td>
</tr>
</tbody>
</table>

#### 9. Unskilled

<table>
<thead>
<tr>
<th>Position</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>Gardener</td>
</tr>
<tr>
<td>Kennel Man</td>
<td>Veterinarian Hospital Helper</td>
</tr>
<tr>
<td>Grain Sampler</td>
<td>Janitor</td>
</tr>
</tbody>
</table>