PERCEPTIONS OF SELECTED OKLAHOMA SWINE PRODUCERS OF THE OKLAHOMA SWINE EVALUATION STATION

Ву

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Thesis Approved:

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CHAPTER I

INTRODUCTION

In 1981, Oklahoma ranked 23rd in swine production and produced less than .05 percent of the nation's hogs. Unlike the commercial swine industry, the Oklahoma purebred swine industry has been and continues to be nationally prominent. Oklahoma ranks in the top ten in number of registrations in seven of the eight major breeds. Oklahoma has a higher percentage of seedstock producers than any other state.

Swine production in Oklahoma has been primarily located in the central, north central, and northwestern areas of the state although hogs are produced in all 77 counties.

Changes in swine production since 1945 reflect numerous technological innovations. The Oklahoma swine industry has evolved from a small family farming operation with relatively few sows to many instances of capital intensive system which is becoming dominated by the high technology, large, confinement, farrow-to-finish operations.

Oklahoma pork producers, segments of the Oklahoma agribusiness community, and Oklahoma State University (OSU) personnel have expressed a desire to see expansion of the Oklahoma swine industry. In addition, OSU Cooperative Extension program planning seminar participants have in the past pointed to a need for research and

extension projects to encourage increased swine numbers in Oklahoma.

The swine industry is one of the most promising for diversification and expansion of the agricultural sector of the state's economy. Swine are currently being produced successfully on numerous commercial operations within the state.

A total commitment to the swine development program can benefit research, teaching, and extension (Oklahoma Agriculture 2000, 1982). One of the goals of the Oklahoma Swine Evaluation Station (OSES) has been to evaluate the characteristics (related to efficiency) of boars and gilts, so the swine producers of Oklahoma (and surrounding states) would have a place to purchase performance tested boars and gilts.

The OSES was originated in 1970 and is located on the Animal Science Farm at Oklahoma State University, Stillwater, Oklahoma. It is operated jointly by the Oklahoma Swine Breeders Association and Oklahoma State University (OSU Extension Facts, No. 3660, ND).

The objectives of the OSES are:

- 1. To locate and recognize superior breeding stock.
- 2. To assist breeders in evaluating their breeding stock.
- 3. To provide a pool of tested stock for purebred breeders and commercial producers interested in improving the performance of their herd.
- 4. To assist in the improvement of the performance and quality of market hogs (Rules and Regulations, Oklahoma Swine Evaluation Station, 1988).

Statement of the Problem

Since the swine industry in Oklahoma is a contributor to the agricultural industry and economy of Oklahoma, it appears that before significant growth (or maintenance of the industry) can be achieved data must be elicited and analyzed in order that recommendations can be made to improve the OSES. It was apparent that no specific data had been elicited, particularly from the Oklahoma Swine Breeders Association (OSBA) in recent years; therefore, it was apparent that their input was essential.

Purpose of the Study

The purpose of this study was to acquire the perceptions of selected Oklahoma Swine Producers of the Oklahoma Swine Evaluation Station. A further purpose of this study was to determine some of their production practices and problems.

Objectives

In order to achieve the purpose of this study, the following objectives had to be accomplished:

- 1. To determine whether or not the respondents were familiar with the objectives of the Oklahoma Swine Evaluation Station and to determine their source of familiarity.
- 2. To determine whether or not the respondents had ever received literature concerning the OSES.
- 3. To determine the extent the respondents utilized either a "tested" boar or gilt and to determine their extent of satisfaction

concerning their use.

- 4. To determine whether or not the respondents would consider utilizing a "tested" boar or gilt and whether or not they have considered "testing" their offsprings.
- 5. To determine the respondents' perceptions relative to characteristics of "higher indexing" swine and the degree of accuracy of OSES swine data.
- 6. To determine the extent of impact and/or utilization of the OSES and further determine why the OSES may not be utilized.
- 7. To determine common concerns relative to swine diseases, selection of "tested" boars and gilts, methods of determining, backfat, et cetera and methods of marketing.
 - 8. To determine the overall effectiveness of the OSES.
- 9. To determine the years of experience swine producers have and the scope of their operation.

Assumptions of the Study

The following assumptions were made regarding the study:

- The respondents fully understood the questions which were asked.
- 2. That the respondents indicated honest expressions of their opinions.
- The instrument administered would solicit accurate responses.

Scope of the Study

The population of this study included all 301 members of the

Oklahoma Swine Breeders Association. The list of memberships was furnished by Dr. Bill Luce, OSU Swine Extension Specialist. It was unknown if all 301 members were currently producing swine; however, each member was included in the study.

Definitions

The following terms are defined as they apply to this study.

Oklahoma Swine Evaluation Station: Unit where boars and gilts are brought together from various herds for evaluation under uniform management conditions.

Boar: An uncastrated swine.

Gilt: A young female swine that has not produced young.

Tested Boar: An uncastrated swine with his individual performance records given.

Tested Gilt: A young female swine that has not produced young that has her individual performance records given.

Index: Selection tool which combines information from more than one trait using the genetic and economic information concerning each trait.

Excellent Individual (Boar or Gilt): A boar or gilt obtaining the performance figures, genetics and general appearance suitable to one's standards for excellence.

Good Management Techniques: Techniques which allow a facility to be profitable or successful.

<u>Index Figures</u>: Figures obtained from individuals to establish an overall index.

Pedigree: Certificate of ancestry.

General Appearance: As the animal appears in your own sight.

<u>Selection Committee</u>: Committee made up of three individuals that evaluate soundness in sale candidates.

<u>Ultrasound Scanning</u>: Device used to measure backfat and loin eye areas through high frequency sound waves.

Sow: Mature female swine that has produced a litter of pigs.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this chapter was to present a review of literature which was related to performance, testing, and evaluation of the swine industry and especially any materials related to the perceptions of swine breeders pertaining to swine test stations.

The major areas included in this review were: (1) History of performance testing and the improvement of swine, (2) History of the Oklahoma Swine Evaluation Station, (3) Oklahoma swine industry, (4) Testing seasons and procedures, (5) The meat-type hog, (6) The hog market fluctuates widely, (7) Management skills and application of the operator, (8) Perceptions of swine producers, and (9) Summary of the review of literature.

History of Performance Testing and The Improvement of Swine

As the history of swine production is reviewed it is evident that performance testing did not come with the introduction of swine to this nation.

Individual swine breeders have probably always recognized that the offspring of some animals were consistently better than others and therefore consciously promoted their propagation. The formation of the present American breeds of swine in the nineteenth century took individual performance and its transmission into account, but there was no sense of urgency to establish systematic procedures for measuring the performance of swine. Action programs are most likely to be pursued with vigor if they have an economic basis. In Denmark at the beginning of the twentieth century, it was recognized that the British market for Danish bacon could be best maintained and expanded but the production of a uniformly high-quality product. The first Danish swine-testing station was established in 1907. The results have become known throughout the world, and the testing techniques have been adapted to local conditions in every major swine producing country, including the United States.

The history of swine performance testing has been the subject of several reviews (King, 1955; Rice, Andrews, Warwick, and Legates, 1957; Fredeen, 1958; and Craft, 1958). Several important swine-producing nations, including New Zealand and Canada, initiated swine-testing programs in the 1920's. Although the need for such programs in the United States was discussed by swine specialists at that time, the idea was not enthusiastically accepted by the swine producers themselves. Breeders in Iowa, Minnesota, West Virginia, and Wisconsin developed litter-testing programs, and the U. S. Department of Agriculture initiated tests in the Beltsville herd in 1926. After World War II it became apparent that the survival of the swine industry was threatened unless carcass quality could be drastically improved. As a result, the need for large-scale central swine-testing stations became apparent. In 1960 swine-testing stations were in operation in 24 states; in some states as many as 14 different

stations have been established, and in others testing is concentrated in a single large central unit.

The introduction of test stations has been beneficial to many swine producers across the nation, when they strive for the most economical and profitable operation. Nevertheless, there have been varying opinions in recent years as reported by Flemming (1988).

The whole idea of central testing seems to have taken a whipping in recent years. But to date, nobody has come up with any better system for getting unbiased, accurate comparisons of genetics.

Last month, I wrote about the need for a more consistent product. Consistency starts with the breeding stock. Not with breeding stock selected by some show ring judge. But breeding stock selected on facts. Facts learned by testing.

I don't know if the 1988 Pork Challenge was 'fair' or not. 1 I know in the long range, the best way to get fair results is for every likely producer and breeder to use central test stations to their full potential (p. 18).

Regardless of opinions across the nation, the number of swine producers in Oklahoma has increased to the point of ranking in the top ten in numbers of hogs recorded to several breeds, therefore presenting a need for a Swine Evaluation Station to further assist swine producers in production of a more efficient hog.

History of the Oklahoma Swine

Evaluation Station

Since its official beginning in 1970 the Oklahoma Swine

Evaluation Station has served the swine producers of Oklahoma as well

as many other swine producing states across the nation with its

graduates.

While Oklahoma continues to carry the title of having the highest percentage of seedstock producers in relation to the size of the total industry of any of the states in the nation, there remains great opportunities in all areas of swine production in Oklahoma since all 77 counties produce hogs.

Oklahoma Swine Industry

In 1981, Oklahoma ranked twenty-third in swine production and produced less than -0.5 percent of the nation's hogs. Unlike the commercial swine industry, the Oklahoma purebred swine industry has been and continues to be nationally prominent. Oklahoma ranks in the top 10 in number of registrations in seven of the eight major breeds. Oklahoma has a higher percentage of seedstock producers than any other state.

Swine production in Oklahoma has been primarily located in the central, northcentral, and northwestern areas of the state although hogs are produced in all 77 counties.

Changes in swine production since 1945 reflect numerous technological innovations. The Oklahoma swine industry has evolved from a small family farming operation with relatively few sows to a capital intensive system which is becoming dominated by the high technology, large, confinement, farrow-to-finish operations. The development of these systems in Oklahoma was initiated by Oklahoma producers, segments of the Oklahoma agribusiness community, and OSU personnel have expressed a desire to see expansion of the Oklahoma swine industry. In addition, Division of Agriculture program planning seminar participants have repeatedly pointed to a need for research and extension projects to encourage increased swine numbers in Oklahoma.

The swine industry is one of the most promising commodities for diversification and expansion of the agricultural sector of the state's economy. Swine are currently being produced successfully on numerous commercial operations within the state.

Expansion of the Oklahoma Swine industry or an increase in efficiency can only result if current and future participants in the swine industry are kept informed (Meyer, 1981, pp. 113-116, 119).

As the Oklahoma Swine Evaluation Station has and is being utilized by many swine producers to evaluate their own hogs as well as a place to purchase new tested breeding stock others may not be aware of the time in which tests are conducted or the process these boars and gilts undergo during the testing procedure.

OSES Testing Seasons and Procedures

Seasons

Two tests are conducted each year, one beginning in April and the other in October. Each test consists of a separate boar, gilt, and market hog test. A swine producer may enter all three if he chooses.

Procedure

All pigs are tested in modified open front finishing barns with partially slotted floors. Each individual pen is five by 15 feet. The rations are 18 percent crude protein for boars and gilts and 16 percent crude protein for market hogs. All rations are pelleted and fortified to current OSU recommendations.

A swine breeder's entry consists of a pen of three boars which were the progeny of one sire. Each individual pig is required to weight between 32 and 70 pounds when entered. Maximum weight of pigs also could not be more than 1.2 pounds per day of age, five days after the pigs are received at the station. All pens are at the station for at least five days before going to test. k Those pens not averaging 70 pounds at the end of five days are placed on test at a later date when they averaged this weight or when the largest pig in

the pen weighs 80 pounds. The pigs are fed an 18 percent crude protein pelleted ration throughout the test.

Data collected on the boars and gilts when they reach 230 pounds include rate of gain, pen feed efficiency and a scanogram estimate for backfat thickness and loin eye area. The backfat measurements are taken approximately 1.5 inches each side of the midline behind the shoulder, at the last rib, and at the last lumbar vertebrae. The scanogram estimate for loin eye area was taken at approximately the tenth rib.

Boars and gilts are considered qualified to sell at public auction at the completion of the test if they met the following standards:

- 1. An index of at least 80 on the following index: $100 + 60 (\overline{DG}-\overline{DG}) - 75 (\overline{F}/\overline{G}-\overline{F}/\overline{G}) - 70 (\overline{BF}-\overline{BF}).$
 - a. DG = Boar's and gilts test daily gain
 - b. \overline{DG} = Average test daily gain for all boars and gilts in test-scale group.
 - c. F/G = Pen feed conversion.
 - d. $\overline{F/G}$ = Average pen feed conversion for all boars in test-scale group.
 - e. \overline{BF} = Boar's and gilts backfat probe adjusted to 230 pounds.
 - f. \overline{BF} = Average adjusted backfat probe for all boars and gilts in test-scale group.
- Be physically sound as determined by a test station committee.
 - 3. Pass a veterinarian's inspection and have a negative test for

pseudorabies and brucellosis. (Luce, 1986).

While the number of swine producers have used tested boars and gilts with superior index figures to advance their herds in the direction of the ideal hog, new as well as young pork producers may not know the characteristics of the ideal hog. Therefore at the Oklahoma Swine Evaluation Symposium in July of 1983 the characteristics of the ideal barrow as determined by the National Pork Producers was presented. They are as follows: market weight, 240 pounds; litter of ten pigs raised, 150 days to market weight, 32 inch long carcass with 0.70 inches backfat at the tenth rib and a loin eye of 5.8 square inches.

Generally every swine producer in the nation agrees upon the standards the "ideal" market hog should meet. Therefore, the title "Meat-Type Hog" could be assumed for most every swine producer in the nation.

The Meat-Type Hog

The industry is finally pretty well agreed on the type that will be most useful in the foreseeable future and is working seriously to establish that type. This is what is called the meat-type hog. The standard for the carcass of this animal calls for a minimum of fat and a maximum of lean cuts. There is nothing in these specifications that calls for the introduction of any entirely new characteristics into the stock or that requires any major modification in the general type of present-day animals. In fact, they are already met by an encouraging proportion of hogs now on American farms. The problem before breeders is to locate and concentrate desirable characteristics in order that they may be transmitted from parent to offspring with some regularity. A reasonable period of selective breeding should accomplish this.

In 1952, in order to give market recognition to hogs of the desired type, the U.S. Department of Agricul-

ture, after a great deal of study, published market grade specification for slaughter barrows and gilts which for the first time in American market history recognized the changed position of lard in the economy. These standards place a premium on the lean cuts of the carcass and penalize overfinish. Unfortunately, market agencies have been slow to put these standards into general use (England and Winters, 1953, pp. 836-847).

Swine producers across the nation strive to improve their hogs by the incorporation of new genetics, better management skills, et cetera., in order to produce a hog molded as closely to the "ideal" as possible. The prices these producers receive is very unstable and certainly has no boundaries in which it fluctuates.

The Hog Market Fluctuates Widely

The wide and largely unpredictable day-to-day variations that occur on the hog market increase the hazard of the hog business. No satisfactory solution to the problem has been developed: perhaps there is none. The swine grower can reduce the risk involved in this particular situation, to some extent at any rate, by marketing in more than one shipment, thus decreasing the likelihood of hitting a break in the market with his entire crop. This is one of the distinct advantages of planning two or more farrowing period a year (Maynard, 1946, p. 345).

A 1946 reference was cited because it is important to emphasize that marketing of swine has not changed, to any great extent during the past forty years.

During times when hog markets are down and feed prices remain the same the margin for profits greatly decreases, therefore the belt must be tightened and in some cases cutbacks in some areas may be in order for a profit to be made. One area that could make a great deal of different depending upon the individual is the management.

Management Skills and Application

of the Operator

Studies that have been made of the cost of producing pork on practical farms shows wide variations in cost from farm to farm even under similar conditions—variations of more than 100 percent. No amount of skill in selling can overcome such a handicap.

The only explanation that can be offered for many of such variations is the difference in the skill of men as managers. Frequently it is difficult to locate the cause of such different costs. About all that can be said at times is that one man had the 'knack' and another lacks it. Unfavorable weather, changes in business conditions, and many other hazards come to all men alike. The ability of some to cope with adverse conditions is much better than that of others. Indeed, good managers are likely to be prepared for emergencies before they strike, whereas poor managers seem always to be caught unawares by them. Part of the difference, of course, is to be found in the degree of interest in, and application to, the job at hand. The importance of this factor increases with increase in size of operation (Bauman, Eisgruber, Partenheimer, and Powlen, 1961, p. 699).

Even though it may be evident that management skills can play a key role in profit or loss of the production of swine, very little literature was discovered in relationship to the perceptions of these swine producers relative to the swine industry and particularly swine testing.

Perceptions of Swine Producers

Very little literature was found associated with the perceptions of swine producers. However, one article was found. Flemming (1988) stated that:

The whole idea of central testing seems to have taken a whipping in recent years. I know in the long range, the best way to get fair results is for every likely producer and breeder to use central test stations to their full potential" (p. 15).

Summary of the Review of Literature

A review of literature has shown that there has been a great deal of work done to improve the swine industry through swine test stations, regardless of the stability of the market. However, additional literature shows there is a great deal of opportunities remaining in Oklahoma for expansion of swine programs even though all counties are currently producing hogs.

Additional literature shows that Oklahoma Swine Producers have been able to serve themselves as well as others across the nation partially through the services of the Oklahoma Swine Evaluation Station. This service has been made easier since performance tests are generally conducted twice per year. The procedure in which these tests are conducted are closely in compliance with other test stations across the nation that are striving to produce the ideal hog through performance testing.

However, in summarization, there was no related literature found in respect to the perceptions of swine producers with the exception of Flemming (1988) stating that "the whole idea of central testing seems to have taken a whipping in recent years" (p. 15).

CHAPTER III

METHODOLOGY

Introduction

The purpose of this chapter was to describe the methods and procedures used to conduct this study. The purpose of this study was to acquire the perceptions of selected Oklahoma Swine Producers of the Oklahoma Swine Evaluation Station. In order to accomplish the purpose and objectives of this study, it was necessary to determine the population and develop a questionnaire which would provide the necessary information. A Procedure for the collection of data was established and the methods to analyze the data were chosen.

Institutional Review Board (IRB)

Federal regulations and Oklahoma State University policy require review and approval of all research studies that involve human subjects before investigators can begin their research. The Oklahoma State University Office of University Research Services and the IRB conduct this review to protect the right and welfare of human subjects involved in biomedical and behavioral research. In compliance with the aforementioned policy, this study received the proper surveillance and was granted permission to continue.

The Population

The population of this study included all 301 members of the Oklahoma Swine Breeders Association. The list of memberships was furnished by Dr. William G. Luce, OSU Swine Extension Specialist.

It was unknown if all 301 members were currently producing swine, however, each member was included in the study. Of the 301 members, 96 (31.9 percent) responded to the survey (See Table I).

TABLE I

FREQUENCY DISTRIBUTION OF OKLAHOMA SWINE PRODUCERS RESPONDING TO THE MAILED QUESTIONNAIRE

Category	Frequency N	Distributor %
		<i>7</i> 6
Respondent	96	31.9
Non-Respondents	205	68.1
Total	301	100.0

Development of the Instrument

In formulating the questions for the instrument (See Appendix A), the writer used input from the faculty and staff of the Agricultural Education Department and from Dr. William Luce, Swine Extension Specialist, Animal Science Department at Oklahoma State University.

In analyzing various methods of data gathering, the mailed questionnaire was determined the most appropriate method to meet the study objectives.

Again, considering time and number of population, it was decided that mailing the questionnaire to the swine producers would be most desirable. It was also decided to not use any type of coding method to insure confidentially. Since there were no studies of this type found, the questionnaire was not patterned after any other questionnaire and was completely original.

Throughout the process of developing the questionnaire, the length of the instrument was of concern. Some individuals felt that if the instrument was too long swine producers would be hesitant to respond. The instrument was designed to require about ten minutes of the swine producer's time to provide the needed information.

The Instrument

To gather data concerning perceptions of the selected Oklahoma swine producers, one open ended question was asked, the remaining 19 questions were forced choice. Of these 19 forced choice questions seven provided the respondent an opportunity to provide additional input.

The questions were developed from the objectives related to the Oklahoma Swine Evaluation Station and the perceptions of the swine producers.

Dr. William G. Luce initially reviewed the questionnaire. Upon completion of his review, revisions were made. The author's major adviser then reviewed each question and upon completion of the review

additional revisions were made. Once the questions were fully developed as the survey instrument, it was determined that they were ready to be mailed to the swine producers.

Upon completion of the questionnaire it was mailed to the members of the Oklahoma Swine Breeders Association during the Fall of 1988.

Included was a self-addressed, stamped envelope for the return of the questionnaire.

To insure confidentiality of the responses, the initial mail-out was not coded. Because there was absolutely no method to determine who had responded and who did not respond, there was no follow-up mail-outs conducted.

Analysis of Data

Data from the questionnaire was analyzed utilizing descriptive statistics. It is important to point out that frequency distribution includes numbers and percents. In addition, mean scores were used to interpret the data.

The primary use of descriptive statistics is to describe information or data through the use of numbers. The characteristics of groups of numbers representing information or data are called descriptive statistics. Descriptive statistics are used to describe groups of numerical data such as test scores, number or hours of instruction, or the number of students enrolled in a particular course (Key, 1981, p. 126).

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter was to report the results from the questionnaire used to conduct the study. The intent of this study was to determine the perceptions of selected Oklahoma Swine Producers of the Oklahoma Swine Evaluation Station (OSES). A further purpose of this study was to determine some of their production practices and problems.

The scope of this study included a total of 301 members of the Oklahoma Swine Breeders Association. The questionnaire was mailed to the 301 members of the Oklahoma Swine Breeders Association and of the 301 included in this study 91 or 31.90 percent responded to the questionnaire. Their responses are reported in the following tables.

The familiarity the respondents had pertaining to the objectives of the OSES is reported in Table II. Of the 91 respondents 83 or 91.20 percent were familiar with the objectives of the OSES. The remainder of the respondents, eight or 8.80 were not familiar with the objectives of the OSES.

Listed within Table III are the sources in which the respondents became familiar with the OSES. Of the 91 respondents 14 or 21.89 percent became familiar through magazines. Newspapers, radio, and television were not sources of information according to the respondents. County Extension offices familiarized 12 or 18.75 percent of the respondents. Vocational Agriculture teachers informed

TABLE II

DISTRIBUTION OF RESPONDENTS BY WHETHER OR NOT THEY
WERE FAMILIAR WITH THE OBJECTIVES OF THE
OKLAHOMA SWINE EVALUATION STATION

Frequency Distribut					
N	%				
83	91.20				
8	8.80				
91	100.00				
_	91				

TABLE III

DISTRIBUTION OF RESPONDENTS RELATIVE TO HOW THEY
BECAME FAMILIAR WITH THE OKLAHOMA SWINE
EVALUATION STATION

How They Became Familiar with OSES	Frequenc	y Distribution %
Magazines	14	21.89
Newspapers	0	0
Radio	0	0
Television	0	0
County Extension Office	12	18.75
Vocational Agriculture Teacher	11	17.18
Other Breeders	12	18.75
Other	15	23.43
Total Responses	64*	100.00

 $[\]star Only$ those respondents who were familiar with the OSES were asked this question.

11 or 17.18 percent of the respondents. The other breeders informed 12 or 18.75 percent of the respondents. The remaining 15 or 23.43 percent were informed by other sources.

Reported in Table IV were the responses pertaining to whether or not the respondents had ever received literature concerning the OSES. Of the 91 respondents 83 or 91.20 percent had received information concerning the OSES. While six or 6.38 percent had not received information. The remainder of the respondents, two or 2.42 percent, had not received information, but would like to.

How frequently they utilized either a "tested" boar or gilt in their breeding program is reported in Table V. Of the 91 respondents, 18 or 18.69 percent had frequently used a "tested" boar or gilt.

Nevertheless, 32 or 35.16 percent had used a "tested" boar or gilt only seldom. The remainder of the respondents 42 or 46.15 percent had never used a "tested" boar or gilt.

Reported in Table VI are the responses pertaining to how satisfied the respondents were concerning the "tested" boar or gilt they had used (only respondents who had used wither a "tested" boar or gilt were asked this question). Of the 45 respondents, 14 or 37.77 percent were very satisfied, 27 or 60.00 percent were satisfied, and four or 2.23 percent were dissatisfied. None of the respondents indicated that they were very dissatisfied.

Table VII reveals whether or not the respondents would consider using either a "tested" boar or gilt (only respondents who had never used a "tested" boar or gilt were asked to respond to this question). Of the 42 respondents, 30 or 71.42 percent reported yes, four or 9.54 percent reported no, of the remainder 42, eight or 19.04 percent

TABLE IV

DISTRIBUTION OF RESPONDENTS PERTAINING TO WHETHER OR NOT THEY HAVE EVER RECEIVED LITERATURE CONCERNING THE OKLAHOMA SWINE EVALUATION STATION

Frequency Distributio					
N	%				
83	91.20				
6	6.38				
2	2.42				
91	100.00				
	83 6 2				

TABLE V

DISTRIBUTION OF RESPONDENTS PERTAINING TO HOW FREQUENTLY
THEY UTILIZED EITHER A 'TESTED' BOAR OR GILT
IN THEIR BREEDING PROGRAM

Frequency of Use	Frequency D N	istribution %
Frequently	17	18.69
Seldom	32	35.16
Never	42	46.15
Total Responses	91	100.00

TABLE VI

DISTRIBUTION OF RESPONDENTS PERTAINING TO HOW SATISFIED THEY WERE CONCERNING THE 'TESTED' BOAR OR GILT THEY HAD USED*

	Frequency D	istribution
How Satisfied	N	%
Very Satisfied	14	37.77
Satisfied	27	60.00
Dissatisfied	4	2.23
Very Dissatisfied	0	0
Total Respondents	45	100.00

*Only respondents who had used either a "tested" boar or gilt were asked to answer this question.

TABLE VII

DISTRIBUTION OF RESPONDENTS RELATIVE TO WHETHER OR NOT THEY WOULD CONSIDER USING EITHER A 'TESTED' BOAR OR GILT*

Use A "Tested" Boar or Gilt	Frequency N	Distribution %
Yes	30	71.42
No	4	9.54
Uncertain	8	19.04
Total Responses	42	100.00

*Only respondents who had never used a "tested" boar or gilt were asked to respond to this question.

reported they were uncertain if they would consider using a "tested" boar or gilt.

Within Table VIII, it is reported whether or not the respondents have considered "testing" any of their offspring at the OSES. Of the 91 respondents, 68 or 74.72 percent had considered testing, 15 or 16.48 percent had not considered testing. Of the remaining respondents, eight or 8.88 percent would like more information before making a decision.

Within Table IX, the meaning of "high indexing" swine at the OSES as perceived by the respondents is reported. Of the 91 respondents, four or 4.39 percent perceived "high indexing" a result of a successful swine producer, 23 or 25.27 percent selected excellent individuals (animals), four or 4.39 percent selected good management techniques, 59 or 64.83 percent of the respondents selected all of the above (combined); however, only one or 1.12 percent of the respondents chose other meanings of "high indexing" other than those previously listed.

Within Table X the impact the respondents believe the OSES had on assisting swine producers to stay in the profession is reported. Of the 91 respondents 13 or 13.18 percent reported a tremendous impact, 48 or 52.74 percent an impact, 30 or 32.96 percent some or little impact, and only one or 1.12 percent reported no impact.

Within Table XI the extent the OSES is being utilized by swine producers is reported. Of the 91 respondents, four or 4.41 percent report great extent, 57 or 62.63 percent reported some extent, 30 or 32.96 percent reported not being utilized sufficiently.

TABLE VIII

DISTRIBUTION OF RESPONDENTS PERTAINING TO WHETHER OR NOT THEY HAVE CONSIDERED 'TESTING' ANY OF THEIR OFFSPRING AT THE OSES

Considered "Testing"	Frequency I	Distribution %
Yes	68	74.72
No	15	16.48
Would like more information before making decision	8	8.80
Total Response	91	100.00

TABLE IX

DISTRIBUTION OF THE RESPONDENTS' KNOWLEDGE OF THE MEANING OF 'HIGH INDEXING' SWINE AT THE OSES

"High Indexing" is a Measure of:	Frequency D N	istribution %
A successful swine producer	4	4.39
Excellent Individual (animals)	23	25.27
Good management techniques	4	4.39
All of the above (combined)	59	64.83
Other	1	1.12
Total Responses	91	100.00

TABLE X

DISTRIBUTION OF RESPONDENTS RELATIVE TO THE IMPACT THEY BELIEVE THE OSES HAD ON ASSISTING SWINE PRODUCERS TO STAY IN THE PROFESSION

	Frequency Distribution	
Amount of Impact	N	%
Tremendous Impact	12	13.18
An Impact	48	52.74
Some or Little Impact	30	32.96
No Impact	1	1.12
Total Responses	91	100.00

TABLE XI

DISTRIBUTION OF RESPONDENTS' OPINION RELATIVE TO THE EXTENT
THE OSES IS BEING UTILIZED BY SWINE PRODUCERS

Extent of OSES Use	Frequency D N	istribution %
Greater Extent	4	4.41
Some Extent	57	62.63
Not Being Utilized Sufficiently	30	32.96
Total Responses	91	100.00

The 30 respondents (who indicated that in their opinion the OSES was not being utilized sufficiently by swine producers) were asked an additional question. They were asked to write in a major reason they believed the OSES was not being utilized sufficiently by swine producers. Their responses were summarized as follows:

"Lack of knowledge about OSES."

"Lack of interest about OSES."

"Not enough readily available information."

"Majority of the swine producers are not trying to improve their swine; but are only following trends in the industry."

"Too expensive to utilize the OSES."

"Lack of commonality between purebred and commercial breeds."

"Markets too weak to justify if."

"OSES is not commercially oriented."

"Lack of demand for tested swine."

"OSES tested program is not congruent with show pig circuit."

How accurate the respondents believed the information and/or data collected at the OSES is reported in Table XII. Of the 91 respondents, 35 or 38.46 percent, reported very accurate, 54 or 59.34 percent reported accurate, while only two or 2.20 percent reported less than accurate. No respondents reported that the information or data was not accurate.

Within Table XIII, the reasons the respondents would most likely purchase a "tested" boar or gilt is reported. Of the 91 respondents, 36 or 39.56 percent of the respondents selected index figures, five or 5.59 percent selected pedigree, three or 3.29 percent selected general appearance, one or 1.12 percent of the respondents chose reputation of

TABLE XII

DISTRIBUTION OF RESPONDENTS' OPINION PERTAINING TO HOW ACCURATE THEY BELIEVED THE INFORMATION AND/OR DATA COLLECTED AT THE OSES IS

How Accurate		Frequency D	istribution %
Very Accurate		35	38.46
Accurate		54	59.34
Less Than Accurate		2	2.20
Not Accurate		0	0
Total Responses	-	91	100.00

TABLE XIII

DISTRIBUTION OF RESPONDENTS' REASONS THEY WOULD MOST LIKELY PURCHASE A 'TESTED' BOAR OR GILT

Reason to Purchase	Frequency N	Distribution %
Index Figures	36	39.56
Pedigree	5	5.49
General Appearance	3	3.29
Reputation of Breeder	1	1.12
All of the above	. 44	48.35
Other	0	0
Would not purchase either boar or gilt, regardless	2	2.19
Total Responses	91	100.00

breeder, 44 or 48.35 percent selected all of the above reasons. None of the respondents selected other reasons than those listed. Two or 2.19 of the respondents would not purchase either boar or gilt regardless.

Table XIV reveals the respondents' opinions regarding which one disease they believe is the major problem concerning swine producers in Oklahoma. Of the 91 respondents, 12 or 12.18 percent selected psuedorabies, one or 1.13 percent selected leptospirosis, three or 3.29 selected myco-plasma pneumonia, no respondents selected brucellosis or erysipeles, 48 or 52.74 percent selected E.coli-scours, 15 or 16.48 percent selected T.G.E., eight or 8.79 percent selected rhinitis, and four or 4.39 selected other.

Within Table XV, it is reported how the respondents believed "tested" boars and gilts should be selected at the OSES sale. Of the 91 respondents, seven or 7.69 percent indicated selection should be based on index only, no respondents selected "based on soundness only," 83 or 91.20 percent selected "based on index and soundness (as viewed by a selection committee)," No respondents selected based on opinion of individual judge, one or 1.11 percent of the 91 respondents selected other methods than those listed.

Within Table XVI the respondents' opinions pertaining to the one best method of determining backfat and loin-eye area values is reported. Of the 91 respondents, 72 or 79.12 percent, selected ultrasound scanning, 18 or 19.79 percent selected manual probing (backfat). No respondents selected simple queuing methods and one or 1.10 percent of the respondents chose other methods than those listed.

TABLE XIV

DISTRIBUTION OF RESPONDENTS' OPINION REGARDING WHICH ONE DISEASE THEY BELIEVE IS THE MAJOR PROBLEM CONCERNING SWINE PRODUCERS IN OKLAHOMA

Major Disease Problem	Frequency I	Distribution %
Psuedorabies	12	13.18
Leptospirosis	1	1.13
Myco-plasma Pneumonia	3	3.29
Brucellosis	0	0
Erysipeles	0	0
E.coli-scours	48	52.74
T.G.E.	15	16.48
Rhinitis	8	8.79
Other	4	4.39
Total Responses	91	100.00

TABLE XV

DISTRIBUTION OF RESPONDENTS PERTAINING TO HOW THEY BELIEVE
'TESTED' BOARS AND GILTS SHOULD BE SELECTED AT
THE OSES SALE

	Frequency I	istribution
Method of Selection for Sale	N	%
Basedon Index, only	7	7.69
Based on Soundness, only	0	0
Based on Index and Soundness (as viewed by a selection committee)	83	91.20
Based on Opinion of Individual Judge	0	0
Other	1	1.11
Total Responses	91	100.00

TABLE XVI

DISTRIBUTION OF RESPONDENTS' OPINION PERTAINING TO THE ONE BEST METHOD OF DETERMINING BACKFAT AND LOIN EYE VALUES

Best Method	Frequency D	istribution %
Ultrasound Scanning	72	79.12
Manual Probing (backfat)	18	19.78
Simple Guessing	0	0
Other	1	1.11
Total Responses	91	100.00

Within Table XVII, the respondents' opinion regarding the one method of marketing to be the best method is reported. Of the 91 respondents, 57 or 62.63 percent selected "common auction," 20 or 21.97 percent "selected private treaty," eight or 8.79 percent selected "cooperatives," and six or 6.61 percent selected "other" methods than those listed.

Within Table XVIII, the overall effectiveness of the OSES based on the past few years performance is reported. Of the 91 respondents, 18 or 19.78 percent, selected very effective, 41 or 45.05 percent selected effective, 24 or 26.37 percent selected somewhat effective, two or 2.21 percent selected not effective, and six or 6.59 percent responded they were uncertain.

Within Table XIX, it is reported how long the respondents had been involved in the production of swine. Of the 91 respondents, 15 or 16.51 percent had been involved one to five years. Fourteen or 15.38 percent were involved six to ten years. Fourteen or 15.38 percent were involved 11 to 15 years. Nineteen or 20.87 percent were involved 16 to 20 years, and 29 or 31.86 percent were involved 21 years or more.

Within Table XX, it is reported how many brood sows the respondents currently have in their breeding program. Of the 91 respondents, eight (8.75 percent), had no sows currently, 26 (28.57 percent) had one to ten brood sows, 20 (21.97 percent) had 11 to 20 brood sows. Ten (10.98 percent) had 21 to 30 brood sows, six (6.59 percent) had 31 to 40 brood sows, three (3.32 percent) had 41 to 50 brood sows, and 17 (19.78 percent) had 50 or more brood sows.

TABLE XVII

DISTRIBUTION OF RESPONDENTS' OPINION REGARDING THE ONE METHOD OF MARKETING TO BE THE BEST METHOD

		Distribution
Best Marketing Method	N	%
Common Auction	57	62.63
Private Treaty	20	21.97
Cooperatives	8	8.79
Other	6	6.61
Total Responses	91	100.00

TABLE XVIII

DISTRIBUTION OF RESPONDENTS PERTAINING TO THE OVERALL EFFECTIVENESS OF THE OSES BASED ON THE PAST FEW YEARS PERFORMANCE

	Frequency	Distribution
OSES Effectiveness	N	%
Very Effective	18	19.78
Effective	41	45.05
Somewhat Effective	24	26.37
Not Effective	2	2.21
Uncertain	6	6.59
Total Responses	91	100.00

TABLE XIX

DISTRIBUTION OF RESPONDENTS PERTAINING TO HOW LONG
THEY HAD BEEN INVOLVED IN THE PRODUCTION OF SWINE

Length of Time in Production	Frequency D N	istribution %
1 to 5 years	15	16.51
6 to 10 years	14	15.38
11 to 15 years	14	15.38
16 to 20 years	19	20.87
21 years or more	29	31.86
Total Responses	91	100.00

TABLE XX

DISTRIBUTION OF RESPONDENTS RELATIVE TO HOW MANY BROOD SOWS THEY CURRENTLY HAVE IN THEIR BREEDING PROGRAM

Number of Brood Sows	Frequency N	Distribution %
0 (none)	8	8.79
1 to 10	26	28.57
11 to 20	20	21.97
21 to 30	10	10.98
31 to 40	6	6.59
41 to 50	3	3.32
51 or more	18	19.78
Total Responses	91	100.00

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The intent of this chapter was to present concise summaries of the following topics: purpose of the study, design of the study, objectives of the study, land the major findings of the research. Through a detailed inspection of these topics, conclusions, and recommendations were presented based on the analysis of the data.

Purpose of the Study

The purpose of this study was to determine the perceptions of related Oklahoma Swine Producers of the Oklahoma Swine Evaluation Station (OSES). A further purpose of this study was to determine some of their production practices and problems.

Design of the Study

Following a review of literature and research indirectly and/or directly related to this study, procedures were established to satisfy the purpose of the study.

The population of this study was derived from the list of members of the Oklahoma Swine Breeders Association. That list also contained their mailing addresses. The names and mailing addresses of the swine producers (members) were furnished by Dr. Bill Luce, OSU Cooperative

Extension Service State Swine Specialist. The total population consisted of 301 Oklahoma Swine Breeders Association members

Of the 301 members, 91 (320.23 percent) responded to the mailed questionnaire.

The data collected for this study were collected using a mailed questionnaire. The questionnaire developed contained a total of 20 individual questions (most of which were forced choice response types of questions).

The data were collected during the Fall of 1988. Following the collection of data, an analysis of the data was conducted utilizing descriptive statistics (primarily frequency distributions).

Objectives of the Study

- 1. To determine whether or not the respondents were familiar with the objectives of the OSES and to determine their source of familiarity.
- 2. To determine whether or not the respondents had ever received literature concerning the OSES.
- 3. To determine the extent the respondents utilized either a "tested" boar or gilt and to determine their extent of satisfaction concerning their use.
- 4. To determine whether or not the respondents would consider utilizing a "tested" boar or gilt and whether or not they have considered "testing" their offspring.
- 5. To determine the respondents' perceptions relative to characteristics of "high indexing" swine and the degree of accuracy of the OSES swine data.

- 6. To determine the extent of impact and/or utilization of the OSES and further determine why the OSES may be utilized.
- 7. To determine common concerns relative to swine diseases, selection of "tested" boars and gilts, methods of determining backfat, et cetera, and methods of marketing.
 - 8. To determine the overall effectiveness of the OSES.
- 9. To determine the years of experience swine producers have and the scope of their operation.

Major Findings of the Study

A summary of the responses to questions pertaining to the Oklahoma Swine Evaluation Station (OSES) is presented in Table XXI.

The largest group of respondents (more than 91 percent) indicated that they were familiar with the objectives of the OSES.

Of those respondents who were familiar with the objectives of the OSES, it was determined that their major source of familiarity resulted from information provided by magazines, county cooperative extension offices, vocational agriculture teachers, and other swine breeders. It was particularly notable that none of the respondents received any information through either newspaper, radio, or television.

When asked if they had ever received literature concerning the OSES, a large majority of the respondents (more than 91 percent) indicated they had.

Almost one-half (46.15 percent) of the respondents had never utilized a "tested" boar or gilt and almost that many had seldom ever

TABLE XXI

SUMMARY OF RESPONSES TO QUESTIONS PERTAINING TO THE OKLAHOMA SWINE EVALUATION STATION

	equenc Respo	y Distribution	То	tals
Questions <u>or</u>	N	% %	N	%
Familiar with OSES				
Yes	83	91.20	91	100.00
No	8	8.80		
Source of Familiarity				
Magazine	14	21.89		
Newspapers	0	0		
Radio	0	0 1		
Television	0	0		
County Extension Office	12	18.75		
Vo-Ag Teacher	11	17.18		
Breeders	12	18.75		
Other	15	23.43	64	100.00
Ever Received Literature				
Yes	83	91.20		
No	6	6.38		
No, but would like to	2	2.43	91	100.00
Tested Boar/Gilt Use				
Frequently	17	18.69		
Seldom	32	35.16		
Never	42	46.15	91	100.00
Tested Boar/Gilt				
Very Satisfied	14	37.77		
Satisfied	27	60.00		
Dissastisfied	4	2.23		
Very Dissatisfied	0	0.00		
Considered Using Tested Boar/Gilt				
Yes	30	71.42		
No	4	9.54		
Uncertain	8	19.04	42	100.00
Consider Testing				
Offspring				
Yes	68	74.72		
No	15	16.48		
Need more Info.	8	8.80	91	100.0

TABLE XXI (Continued)

	Frequency I of Response	Distribution es	То	tals
	N	%	N ==	<u></u> %
Meaning of "High Index	ing"			
Successful Swine	Ü			
Producer	4	4.49		
Excellent Individua	1 23	25.27		
Good Management	4	4.39		
All Listed	4	4.39		
Other	1	1.12	91	100.00
OSES Impact				
Tremendous	12	13.18		
An Impact	48	52.74		
Some or Little	30	32.96		
No Impact	1	1.12	91	100.00
Extent of OSES Use				
Great	4	4.41		
Some	57	62.63		
Not being Used				
Sufficiently	30	32.56	91	100.00
Accuracy of OSES Data				
Very	35	38.46		
Accurate	54	59.34		
Less than Accurate	2	2.20		
Not Accurate	0	0	91	100.00
Boar or Gilt Purchase				
Reasons				
Indix Figures	36	39.56		
Pedigree	5	5.59		
General Appearance	3	3.29		
Breeder Reputation	1	1.12		
All Listed	44	48.35		
Other	0	0		
Not Purchase	2	2.19	91	100.00
Major Disease Problem				
Psuedorabies	12	13.18		
Leptorpirosis	1	1.13		
Myco-plasma Pneumon	ia 3	3.39		
Brucellosis	0	0		
Erysipeles	0	0		
E,coli-Scours	48	52.74		
Rhinitis	8	8.79		
Other	4	4.39	91	100.00

TABLE XXI (Continued)

	requency I of Response	istribution s	Tot	tals
	N N	%	N	%
Selection for Sales				
Index Only	7	7.69		
Soundness Only	0	0		
Both Index & Soundne	ess 83	91.20		
Individual Judge	0 .	0		
Other	1	1.11	91	100.00
Backfat & Loin-Eye				
Determination				
Ultra-Sound	72	79.12		
Manual Probing	18	19.78		
Guessing	0	0		
Other	1	1.10	91	100.00
Best Marketing Method				
Common Auction	57	62.63		
Private Treaty	20	21.97		
Cooperative	8	8.79		
Other	6	6.61	91	100.00
OSES Effectiveness				
Very	18	19.78		
Effective	41	45.05		
Somewhat Effective	24	26.37		
Not Effective	2	2.21		
Uncertain	6	6.59	91	100.00
Producing Swine-How Lon	ıg			
1 - 5 years	15	16.51		
6 - 10 years	14	15.38		
11 - 15 years	14	15.13		
16 - 20	19	20.87		
21 or more years	29	31.86	91	100.00
Number of Brood Sows				
None	8	8.79		
1 - 10	26	28.57		
11 - 20	20	21.97		
21 - 30	10	10.98		
31 - 40	6	6.54		
41 - 50	3	3.32		
51 or more	18	19.78	91	100.00
J2	10	27.70	7.	100.00

utilized a "tested" boar or gilt. In summary, only 17 (18.65 percent) frequently used "tested" boars or gilts. Of those respondents who had used either a "tested" boar or gilt, nearly all (97.77 percent) were satisfied. Of those respondents who had never utilized a "tested" boar or gilt, 71.42 percent indicated that they would consider doing so.

When asked if they would consider "testing" their offspring at the OSES, most of them indicated they would; however, very few indicated they would not, and some were uncertain.

A great many of the respondents indicated that, to them, "high indexing" was a measure of a successful swine producer, excellent individual (animals), and good management techniques.

When asked to rate the impact the OSES has had relative to assisting swine producers stay in the profession, 65.92 percent indicated that the OSES had an impact; however, almost one-third of the respondents indicated that the OSES had little impact.

Only a few of the respondents indicated that the OSES was being utilized to a great extent by swine producers and the majority of the respondents indicated it was being used to some extent. Otherwise, many of the respondents believed that the OSES was not being utilized sufficiently.

Almost all of the respondents (97.80 percent) believed the information and/or data collected at the OSES was accurate.

Forty-four (48.35 percent) of the respondents indicated they would purchase a "tested" boar or gilt based on index figures, pedigree, general appearance, and breeder reputation; however, 39.56 percent of the respondents would have made their purchase based on

index figures alone.

The major disease problems, according to the respondents, were E.coli-scours and Psuedorabies.

When asked how "tested" boars and gilts should be selected to be sold at the OSES sale, a great many of the respondents (91.20 percent) indicated that the selection should be based on index and soundness as viewed by a committee.

The respondents also indicated that the one best method of determining backfat and loin-eye area values were by the use of ultrasound scanning; however, a few of the respondents supported manual probing as the best method.

Concerning the one best method of marketing considered by the respondents, the common auction was more predominate followed by private treaty.

The respondents were asked to rate the overall effectiveness of the OSES. Of the 91 respondents, more than two-thirds of the members indicated that the OSES was effective overall.

It was especially notable that the respondents were almost proportionate in all categories pertaining to the number of years they had been producing swine. And, as well, there was a remarkable even distribution among all categories pertaining to the number of brood sows they had.

Finally, although Table XXI summarized most of the findings of this study, it did not present a summary of the findings pertaining to the question asked relative to why some of the respondents believed the OSES was not being utilized sufficiently by swine producers. A complete listing of their responses can be found in Chapter IV;

however, to summarize, most of the responses can be grouped into two major reasons: (1) it is not economically feasible to utilize the OSES, and (2) many swine producers just do not have enough knowledge or information pertaining to OSES.

Conclusions

The analysis of data and subsequent findings were the basis for the following conclusions.

- 1. Although most of the respondents were familiar with the objectives of the OSES, there were almost ten percent who were not. Based on the findings that there were almost ten percent who were not aware of the objectives, it was concluded than an awareness program should be considered.
- 2. Based on the findings, it was concluded that county-agents, vocational agriculture teachers, and magazines are excellent sources of information pertaining to the OSES objectives and/or services. It was further concluded that newspapers, radio, and television were not sources of information.
- 3. It was concluded that some of the swine producers had never received literature concerning the OSES.
- 4. Although many of the respondents had utilized a "tested" boar or gilt, it was concluded that almost as many never did. It was further concluded, that among those who had utilized a "tested" boar or gilt they were generally satisfied. It was further concluded that even though many had never utilized a "tested" boar or gilt, they might.
 - 5. Based upon the findings, it was concluded that reference to

"high indexing" meant (according to a majority of the respondents), the animal was an excellent individual produced by a successful swine producer who practiced good management.

- 6. It was further concluded, as a result of the respondents' opinions, that the OSES has had "an impact" relative to assisting the swine producers to stay in the profession.
- 7. Even though many respondents believed the OSES was being utilized to some extent by swine producers, it was concluded that many were not utilizing the OSES because it was not economically feasible and they were not knowledgeable about the OSES.
- 8. Based on the findings of this study, it was concluded that the information and/or data collected at the OSES is accurate.
- 9. It was further concluded that swine producers would take many things into consideration before purchasing a "tested" boar or gilt.

 Among the many things taken into consideration would be index figures, pedigree, general appearance, and reputation of the breeder.
- 10. There was no question pertaining to the major disease concerning swine producers. Based on the findings of this study a major concern is E.coli-scours.
- 11. Since an overwhelming majority of the respondents believed that "tested" boars and gilts should be selected for sale based on index and soundness by a selection committee, it was concluded that this method of selection be used.
- 12. It was further concluded that ultra-sound scanning is the one best method of determining backfat and loin-eye values.
- 13. All alternatives considered, it was concluded that the common auction and/or private treaty remains the best marketing method for

swine producers.

14. And finally, based upon the findings of this study, there is not a typical swine produced. The respondents were quite varied in terms of years of producing swine and in terms of number of brood sows in their operation.

Recommendations

As a result of the conclusions drawn from the analysis and interpretation of data, the following recommendations were made.

- 1. Based on the conclusions that some respondents were not aware of the objectives of the OSES, it is highly recommended that an awareness program be implemented with the objective of forwarding literature (which contains information about the OSES) to all known swine producers. A further recommendation includes giving consideration to utilizing newspapers, radio, and television to transmit the information.
- 2. Based on the conclusion that many respondents were not utilizing the OSES sufficiently because it was not economically feasible, perhaps consideration by the OSES should be given to making the program more economically feasible.
- 3. Based on the conclusion that E.coli-scours is a major disease concern, perhaps additional attention should be given to this disease problem.
- 4. Based on the conclusions drawn, it is highly recommended that ultrasound scanning continue to be used to determine backfat and loin-eye area values.

Additional Recommendations

- 1. There should be a study conducted to determine what would be the most reliable method of dissemination of information to swine producers.
- 2. Research should be conducted to specifically determine all criteria swine producers use to select breeding stock.
- 3. Research should be conducted to determine if there is a conflict of interest of commercial and purebred breeders concerning the OSES.
- 4. Research should be conducted to determine the level of financial support swine breeders are willing to give or otherwise.
- 5. To conduct research to see if swine breeders are concerned with diseases and management.

Recommendations for Additional Research

It is recommended that a follow-up study be conducted of this study and findings be referred back and compared to the findings of this study.

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APPENDIXES

APPENDIX A

COVER LETTER

October 12, 1988

Dear Swine Producer,

Enclosed is a questionnaire which has been designed to elicit data pertaining to selected aspects of the Oklahoma Swine Evaluation Station at Stillwater, Oklahoma. Since you have been identified as a producer of swine, we would certainly appreciate your input regarding this research.

A secondary purpose of this research is for me to partially fulfill the requirements of a Master of Science Degree in Agriculture Education; therefore, please take a few minutes of your time to answer the questions asked. Since time is of essence, please return the questionnaire in the self-addressed stamped envelope. Thanking you in advance for your attention to this request, we remain,

Ricky May

Ricky May, Graduate Assistant

Dr. Eddy Finley Associate Professor

448 Ag Hall

Oklahoma State University Stillwater, Oklahoma 74078

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APPENDIX B

QUESTIONNAIRE

"Instructions"

Please check the appropriate response to the questions which are asked. Also, please indicate (where appropriate) any additional information you wish to provide. Be as honest and open as you can. Your response will most assuredly remain anonymous. Thank you for your cooperation.

1.	Are you familiar with the objectives of the Oklahoma Swine Evaluation Station?
	yes
	no (move to question #3)
2.	How did you become familiar with the Oklahoma Swine Evaluation Station?
	magazines County Extension office
	newspapers vo-ag teacher
	radio other breeders
	tv other
з.	Have you ever received literature concerning the Oklahoma Swine Evaluation Station?
	yes
	no
	no, but would like to!
4.	How frequently have you utilized either a "tested" boar or gilt in your breeding program?
	frequently (answer question #5)
	never(answer question #6)
5.	How satisfied are you concerning the tested boars or gilts you have used?
	very satisfied dissatisfied
	satisfied verv dissatisfied

6.	Would you consider utilizing either a tested boar or gilt?
	yes
	no
	uncertain
7.	Have your considered "testing" any of your offspring at the Oklahoma Swine Evaluation Station?
	yes
	no
	would like more information before making a decision
8.	"High indexing" swine at the Oklahoma Swine Evaluation Station is a measure of \cdot .
	a successful swine producer
	excellent individual (animals)
•	good management techniques
	all of the above (combined)
	other
9.	Rate the impact that you believe the Oklahoma Swine Evaluation Station has relative to assisting Swine Producers to stay-in-the-profession.
	tremendous impact
	an impact
	some or little impact
	no impact
٥.	In your opinion to what extent is the Oklahoma Swine Evaluation Station being utilized by swine producers?
	great extent(answer question #12)
	not being utilized sufficiently (answer question #11)

	zed sufficiently?
	
	accurate do you believe the information and/or data ected at the Oklahoma Swine Evaluation Station is?
	_ very accurate
	accurate
	less than accurate
	not accurate
	what reasons would you most likely purchase a "teste or gilt?
	_ index figures
	_ pedigree
	general appearance
	_reputation of the breeder
	all of the above
	other
	would not purchase either boar or gilt, regardless
	one disease do you believe is the major problem conting Swine producers in Oklahoma?
	ecoli-scours
	T. G. E.
	rhinitis

15.	How should "tested" boars and gilts be selected to be sold at the Oklahoma Swine Evaluation Station sale?
	based on index, only
	based on soundness, only
	based on index and soundness as viewed by a selection committee
	based on opinion of an individual judge
	other
16.	In your opinion, which of the following is the "one" best method of determining backfat and loin-eye values?
	ultra-sound scanning
	manual probing (backfat)
	simple guessing
	other
17.	Which "one" method of marketing do you believe to be the "best method"?
	common auction
	private treaty
	cooperatives
	other
18.	Please rate the overall effectiveness of the Oklahoma Swine Evaluation Station based upon the past few years performance.
	very effective
	effective
	somewhat effective
	not effective
	uncertain

19.	Approximately how long have your been involved the production of swine?
	1-5 years
	6-10 years
	11-15 years
	16-20 years
	21 years or more
20.	Approximately how many brood sows do you currently have in your breeding program?
	0 (name)
	1-10
	11-20
	21-30
	31-40
	41-50
	51 or more

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Rickey Wayne May

Candidate for the Degree of

Master of Science

Thesis: PERCEPTIONS OF SELECTED OKLAHOMA SWINE PRODUCERS OF THE OKLAHOMA SWINE EVALUATION STATION

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Biographical:

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