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SELECTED CHARACTERISTICS OF EQUINE EDUCATION PROGRAMS AT COLLEGES AND UNIVERSITIES

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PROGRAMS AT COLLEGES AND UNIVERSITIES

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CHAPTER I

INTRODUCTION

Equine education programs have been important offerings for many years at colleges and universities throughout the United States. Many land grant universities initiated courses in horse production as part of their curricula in the first quarter of this century. These courses were directly related to the draft horse and mule.

In 1915 horse numbers peaked at 26½ million in this country and continued on a downward trend until the early 60's (1). The decline in interest and horse numbers had a positive correlation with horse production courses offered in the nation's colleges and universities, until very few such courses were still included in curriculums.

Due to mechanization and automation, horse numbers dipped to their lowest level of this century in 1960. After that date the horse population reversed its trend and started catching the attention of the general public with a different image than had been perceived earlier. Draft horses and mules were viewed as work stock and used in the agriculture industry predominately for crop production. With the decline of draft horses and mules and the increase in light horses, the entire horse industry felt the shocking changes as the cow pony on the ranch, race horse on the track, and pleasure horse in urban areas became the forerunners.

The continual increase in the horse population and interest in the light horse caught the attention of many educators, as well as commercial and industrial companies. Ensminger (1) points out that 9 million horses in the United States represent an estimated $13 billion investment. Annual expenditures for horse feed, drugs, tack and equipment average about $1000 per horse, grossing a total of $9 billion per year. In 1966 4-H Club horse projects exceeded beef cattle projects for the first time and have continued this trend during recent years. Ensminger also states that horse shows have increased in size and numbers and horse racing continues to be America's leading spectator sport. Saddle clubs have been established across the nation and more people are riding horses for pleasure than ever before. Considering these factors, horse production courses again started showing up as part of many college and university curriculums in the late 60's and early 70's.

Statement of the Problem

This study was undertaken because of the lack of information on equine education programs in colleges and universities in the United States. Prospective students have been unable to compare programs by curricula and facilities in order to make a decision of institutions to attend. Institutions establishing programs and institutions attempting to expand programs have been unable to compare and summarize existing programs. The lack of information about the state of the art (who is doing what) in equine education in the United States prompted this study.

Purpose of the Study

The main purpose of this study was to determine characteristics of equine education programs at colleges and universities in the United States. The demand for equine education, as dictated by the growth of horse programs and establishment of new programs, prompted the conduct of this study. It was the intent to make information concerning existing programs available to colleges and universities to aid in establishing and/or expanding horse curricula and facilities.

It was further intended to furnish prospective students with information enabling them to choose the institution that is best suited to their educational objectives. Finally, the results of such a study would enable the author to build a model program at Murray State University.

Objectives of the Study

The objectives of this study were to:

1. Formulate a list of colleges and universities offering a course or courses in equine education.
2. Categorize and compare programs according to size as based on semester credit hour equivalency.
3. Classify institutional, state and area needs according to demand for educational programs and importance of industry.
4. Describe institutions direct extent of operational techniques and extra curricular activities associated with equine education programs.
5. Describe patterns of equine program offerings and develop a listing of courses in each offering.

6. Classify horses used in programs by breeds and uses.
7. Describe facilities according to availability and major need of each institution.
8. Identify sources of funding involving administration of each program.
9. Describe assignments, qualifications, training, and salary range of instructors.
10. Identify attitudes toward and status of equine education programs.

Assumptions

For the purpose of this study, the following assumptions were accepted:

1. The responses were given in the manner in which the researcher intended.
2. It was assumed that instructors or chairmen of departments were best qualified to make the evaluations and report information requested in the survey.
3. The list of institutions formulated was comprehensive and complete.

Scope

The scope of the study as recognized by the investigator included the following:

1. This study included only the list of institutions that have had programs for at least one year.

2. In this study, no effort was exerted to examine the number employed in the equine industry upon completion of such a program.
3. The study did not seek to investigate student attitudes or objectives.

Definitions

Equine--Of or relating to the horse.

Equitation--The act or art of riding on horseback.

Semester Hours Equivalency--Quarter hours multiplied by the factor two-thirds.

Major Program--Any group of courses directly associated with equine education with 12 or more semester hours equivalency.

Minor Program--Any course or group of courses directly associated with equine education with 11 or less semester hours equivalency.

Respondents--Institutions which completed and returned questionnaire concerning equine education program.

Post Secondary--Educational institution beyond the high school level. Usually referred to as two or four year programs at Junior Colleges, Community Colleges, State Colleges, and Universities.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The following review of literature includes selected references relating to the state of the art of equine education. In conducting this review, it was discovered that there were two studies that dealt directly with post secondary education in the United States. These consisted of a survey by the Horse Committee of the American Society of Animal Sciences and a master's study at the University of California at Northridge.

These two studies failed to describe the total involvement, objectives, and detailed description of each institution's program. They dealt primarily with availability, nature, and scope of equine programs.

An ERIC (Educational Resources Information Center) computer search was conducted to find any studies that had been done relating to equine education. The following searches were made:

1. Horses and Post Secondary Education
2. Horses or Animal Science and Post Secondary Education
3. Veterinary Assistance Programs and Post Secondary Education

All of the 23 references found by the ERIC searches listed above were reviewed. Most of the these were not relevant to the topic of

this study. For this reason, only one article was used.

Other material reviewed in this chapter came from articles in various magazines and suggestions from many individuals employed in some phase of the equine industry. Due to the fact that little research has been done in equine education, literature concerning this topic was limited.

Status of Equine Education

One of the most recent and related studies dealing directly with equine education programs at colleges and universities was completed by Parmenter at University of California at Northridge. Parmenter (2) studied by questionnaire 86 colleges and universities throughout the United States in June of 1978. The primary objective of her study was to determine the nature and scope of equine education programs being offered in colleges and universities throughout the country and the attitudes of specialists toward these programs.

Some of the major findings were as follows: Animal husbandry departments were responsible for a larger percentage of equine education programs than physical education departments. The major factor in establishing riding programs was community, student, and staff interest. Activity courses most frequently offered balanced, hunt, and stock seat styles of riding with most students receiving one to two hours of activity a week. Farm management training, nutrition and judging were taught most frequently, but many new and innovative courses were also being taught.

Horse shows were the most common method used in raising monies. The most common problems encountered by equine education programs

were inadequate funding and obtaining suitable horses and facilities. A large majority ranked their facilities as good or excellent. Most programs were reported to be relatively new (0-5 years in operation), according to Parmenter.

On the basis of the findings and within the limitations of the study, it was concluded that there is a definite upswing in program quality and quantity due to increased interest. Equine education programs throughout the country are very diversified and yet are experiencing many of the same problems. It was concluded that there is consistency between the opinions of experts and current practices in many of today's college programs.

In 1971 "A Survey of Horse Programs at Colleges and Universities" was conducted by the Horse Committee of the American Society of Animal Sciences, Anthony Borton (3) chairman. The committee studied by questionnaire, 48 colleges and universities that had horse programs. Of the 48 responding, 33 were state colleges and universities and 15 were private colleges. The primary objective of their study was to survey colleges and universities to determine their involvement in horse programs. It was their intent that the summary be of interest and use to colleges and universities in developing their horse programs. From this study the major findings were reported for two categories - state colleges and universities and private colleges. According to this study, the number of horses at state colleges and universities varied from 2 to 125 with the average size herd being 39 horses. A variety of breeds were represented at the institutions as indicated in Table I.

TABLE I

BREEDS OF HORSES USED IN HORSE PROGRAMS AS DETERMINED BY 1971 ASAS STUDY

Breed	Number of Institutions
Quarter Horse	25
Thoroughbred	10
Arabian	10
Morgan	6
Grade	6
Shetland	2
Appaloosa	1
American Saddle Horse	1

Twenty-five of the 33 state institutions indicated they had breeding herds. Only 13 showed their horses and a number of colleges indicated they did not use state funds to pay show expenses. Support of the horses and breeding herds came primarily from state funds and teaching budgets. However, several institutions indicated revolving funds (sale of horses) and private donations as their primary source of funds.

The faculty and staff involvement in college-university horse programs had a very wide range. The personnel engaged in horse

programs varied from 0 to .125 FTE to 3 faculty and 5 staff. There was no way to accurately gauge the faculty effort involved in the horse programs but at most schools there was one faculty member who was primarily concerned with the horse program.

Riding programs were reported in 16 of the 33 schools responding. Credit, usually physical education credit, for riding was offered by 12 of the institutions. The number of students riding varied from 24 to 269 a year with an average of 93 students. Support of riding programs came primarily from departmental funds but several riding programs were self-supporting and a majority charged a riding or laboratory fee. The cost of riding varied from $0 to $50.00 a semester with an average of $39.00 Two institutions had contracts with outside stables for riding and the fee made these programs self-supporting. The number of hours of riding varied from 1 to 5 hours per week.

Twenty-one of the 33 colleges and universities studied in the 1971 ASAS effort indicated they had research programs in progress and the research programs were supported about equally from state funds and private funds. Nineteen of 21 had research in nutrition, 8 of 21 had research in reproduction and one each in management and health.

Most schools taught at least one horse management course, but some institutions taught as many as eight horse related courses. Titles of some of the courses offered were:

Horse Industry

Specialized Horse Enterprises

Horse Husbandry

Stable Management

Equine Evolution and Development

Practice Teaching (Riding Instructor)

Horse Psychology and Training

Genetics of the Horse

Horsemanship (Basic, Intermediate, and Advanced)

Equitation (Basic, Intermediate, and Advanced)

The main problems facing horse programs were insufficient funds, inadequate facilities and lack of administrative support.

Fifteen private colleges responded as having horse programs in the 1971 ASAS study. None of the private institutions had breeding programs or research programs. All the private institutions had riding programs.

The size of their horse herds varied from 12 to 60 with an average herd of 35 horses. Thoroughbred or grade thoroughbred (hunter) horses were by far the most popular breed of the private colleges as indicated by 12 out of the 15 reporting. One school each had Morgans and Arabians. Six of the institutions boarded the students' private horses.

The number of faculty involved in the horse programs at private colleges was considerably higher than at state institutions. Many programs had a Director, Assistant Director, and a number of instructors. The average teaching staff (riding) was 3.5 varying from 1 to 8 full-time individuals.

Enrollment of students in riding programs varied from 20 to 250 with 89 as the average. All 15 private colleges offered academic credit for riding with six giving credit in physical education and one in recreation.

Support for riding programs at private colleges came primarily from student fees. Two-thirds of the colleges indicated this as their primary source of revenue while the other third received support from the general college budget. The cost of riding varied tremendously from $50.00 to $500.00 a semester with the average cost of $135.00 a semester. Several schools charged a per hour rate for riding of $4.00 to $5.00. The average hours of riding were two hours a week but ranged from 1 to 9½ hours.

All of the private colleges had a showing program including primarily performance classes (equitation, dressage, hunter and jumper).

The private and state horse programs appeared to have the common problems of financial support of the riding programs and inadequate facilities. Several of the private colleges indicated that they felt their riding fees were excessive.

Rodgers (4) quotes Borton concerning the ASAS study:

> A lot of the colleges have horse programs in animal science departments, or they are in physical education departments in schools that haven't traditionally had animal science or agriculture. My gut reaction is that a lot of animal science departments don't really know what approach to take on this horse thing (p. 77).

Borton (3) revealed that he felt many institutions did not anticipate equine education growing the way it has. Many animal science departments seemed to be afraid of becoming involved in this new discipline. Perhaps they felt the horse business was not on the same economics as the cattle business and other areas. Many old timers have questioned all the emphasis on the horse, but Borton feels horses are bringing a lot of students into animal sciences.

According to Borton (3), institutions are not equipping students to get jobs. He feels one of the major problems facing colleges in establishing horse programs is finding qualified instructors. Despite current problems, Borton hopes the horse will have a definite place in the education of future students. He explains his philosophy of equine education in the following manner:

> What I'd like to see develop is a situation where schools start to actually develop horse science programs with internships or programs worked out with breeders and horse people where students can apprentice and gain some practical experience to go along with the technical skills they learn in college. /He said,/ I think the time will come when these institutions will develop curriculums such as for a horse management major or a horse science major and things like that. Right now most programs aren't relating to the industry enough (p. 78).

Factors Related to Education in Equine Programs

Rodgers (5) believes experience is a prerequisite for success in a horse related career. He sees youngsters from the city at a disadvantage, but professional horse trainers are not the answer for everyone.

Rodgers reveals there are many opportunities for a career in and around the horse industry that do not require a degree in horse training. He sees the growth of the horse industry and the horse as a recreational product as opening up even more careers for young people in the future.

Another view, comparing first hand work experience to structured educational programs is expressed by Lillibridge (6).

> Riding schools have their place, however, they do not satisfy requirements for extensive first hand experience. Being an apprentice takes a different kind of mental attitude than going to horsemanship school. School atmosphere is intellectually demanding but it does not require becoming responsible for your actions. Poor grades are the only consequences for laziness. If you are actually working under someone, they are allowing you to become part of a business that is their livelihood (p. 27).

Two kinds of educational backgrounds are seen by Potter (7) as prerequisites for students going into upper level management, whether it be for a breeding farm, equestrian center or a private training stable. First, they must possess the technical training in horse sciences. This includes being well informed in the principles and practices of horse behavior, nutrition, genetics, breeding, housing, pasture management, disease control, training, and many other areas. In addition to technical knowledge Potter feels students must possess horsemanship abilities. The right combination of both technical and riding ability equips the student to become a successful manager in the equine industry.

Status of Equine Industry

McElroy (8) reported that the horse industry is the third largest industry in Kentucky and is experiencing tremendous growth. Nationally, the American Horse Council estimates there are 200,000 full-time employees working with 8,000,000 horses in the industry. Employers have a real need for individuals with knowledge of different breeds of horses, of feeding, grooming, exercising, and the care of broodmares, stallions, and yearlings. A recent study by the Kentucky Department of Economic Security verified the need for qualified workers in the

industry which led to the development of the Kentucky Equine Education Program.

The Kentucky Horse Council conducted a survey (9) of horse breeds in Kentucky. In the introduction the Governor of Kentucky, Julian M. Carroll states,

> We have long known that the equine industry is one of the Commonwealths major revenue producers and tourist attractions. We know that horses are a major part of the business and leisure-time activities of a growing number of Kentuckians (p. 2).

The survey showed 204,000 total equines in the state with 146,000 light horses, 5,500 draft, 41,500 ponies and 11,000 mules and donkeys.

The survey reported of the estimated 146,000 light horses in Kentucky in 1977, the largest percentage was composed of Thoroughbreds, with 31.4 percent, American Quarter Horse with 13.5 percent, American Saddle Bred with 12.5 percent, and Tennessee Walking Horse with 9.2 percent. Uses of equines were reported as 46.1 percent for pleasure, 18.6 percent for breeding, 11.8 percent for work, 9.8 percent for show, 9.6 percent for racing, and 3.5 percent for other purposes.

Summary of Review of Literature

In summary, the literature reviewed made it evident that many institutions are pursuing equine education in different directions. The main difference exists in the concentration of riding programs versus management programs. A common problem shared by most institutions concerns the administration of their programs.

Most sources agree that experience as well as education are necessary in pursuing careers in the equine industry. Many states are analyzing the status of the horse industry and the need for qualified personnel in their respective states. The United States Department of Agriculture-Extension and the American Horse Council are taking an interest from the national standpoint.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the methodology of this study. The methodology was dictated by the main purpose of the study, which was to determine characteristics of equine education programs at colleges and universities. In order to accomplish this, the following specific objectives were formulated:

Objectives of the Study

The objectives of this study were to:

1. Formulate a list of colleges and universities offering a course or courses in equine education.
2. Categorize and compare programs according to size as based on semester credit hour equivalency.
3. Classify institutional, state and area needs according to demand for educational programs and importance of industry.
4. Describe institutions direct extent of operational techniques and extra curricular activities associated with equine education programs.
5. Describe patterns of equine program offerings and develop a listing of courses in each offering.
6. Classify horses used in programs by breeds and uses.

7. Describe facilities according to availability and major need of each institution.
8. Identify sources of funding involving administration of each program.
9. Describe assignments, qualifications, training, and salary range of instructors.
10. Identify attitudes toward and status of equine education programs.

To collect information on equine education programs throughout the United States, the author had to accomplish the following tasks:

1. Determine the population for the study.
2. Develop the instrument for collecting data.
3. Develop the procedure for collecting data.
4. Select the method for analysis of data.

Selection of the Subjects

This study was a descriptive research effort and had as a population all the colleges and universities throughout the United States that offered a minimum of one equine course in their curriculum. The American Horse Council, American Society of Animal Sciences, Horseman Magazine, and the National Horse and Pony Youth Activities Council compiled lists which were used as a foundation for comprising the population for this study. A total of 119 institutions were surveyed in conducting this study.

Development of the Instrument

In formulating the questions and statements used in the instrument,

the investigator used past experiences and the aid of advisory committee members. In developing a questionnaire, Best (11) listed eight characteristics of a good questionnaire which should be observed in constructing such instruments. They are as follows:

1. It deals with a significant topic, a topic the respondent will recognize as important enough to warrant spending his time in completing. The significance should be clearly and carefully stated on the questionnaire, or in the letter that accompanies it.

2. It seeks only that information which cannot be obtained from other sources such as school reports or census data.

3. It is as short as possible, only long enough to get the essential data. Long questionnaires frequently find their way into the wastebasket.

4. It is attractive in appearance, neatly arranged, and clearly duplicated or printed.

5. Directions are clear and complete, important terms are defined, each question deals with a single idea, all questions are worded as simply and as clearly as possible, and the categories provide an opportunity for easy, accurate, and unambiguous responses.

6. The questions are objective, with no leading suggestions as to the responses desired. Leading questions are just as inappropriate on a questionnaire as they are in a court of law.

7. Questions are presented in good psychological order, proceeding from general to more specific responses. This order helps the respondent to organize his own thinking so that his answers are logical and objective. It may be well to present questions that create a favorable attitude before proceeding to those that may be a bit delicate or intimate. If possible, annoying or embarrassing questions should be avoided.

8. It is easy to tabulate and interpret. It is advisable to preconstruct a tabulation sheet, anticipating how the data will be tabulated and interpreted, before the final form of the question is decided upon. This working backward from a visualization of the final analysis of data is an important step in avoiding ambiguity in questionnaire form (pp. 151-152).

A mailed questionnaire was used to collect the majority of the data

for this study because it was felt that (1) this type of instrument would furnish the necessary data to fulfill the objectives and (2) collecting data by interview would have been impossible due to the wide area of the population. This study did not involve sampling, the entire population of 119 was surveyed with 95 respondents.

An instrument was developed by the investigator with the help of the advisory committee. Eight major areas were covered by the instrument including the following:

1. Institutional, State and Area Information.
2. Academic Opportunities and Extra Curricular Activities.
3. Curriculum and Related Factors.
4. Breeds and Uses of Horses.
5. Availability of Facilities.
6. Program Funding.
7. Faculty and Staff Data.
8. Attitudes Toward and Status of Programs.

When the instrument was formulated, it was tested by making it available to faculty members at institutions now offering equine courses. Interviews with these faculty members were conducted and necessary changes, deletions and additions were made for clarity. It was then submitted to the investigator's Doctoral Advisory Committee for their critical review and suggestions. A copy of the instrument is exhibited in Appendix A.

Collection of the Data

The instrument was completed in late November, 1978, with the

conduct of a pilot test among faculty with existing programs. This group reported no difficulties with the instrument and it was finalized.

On December 4, 1978, each institution selected for the study was mailed an instrument along with a cover letter from the investigator. A self-addressed, stamped envelope was enclosed for the institution to return the completed instrument. On December 20, 1978, a follow-up letter was sent to non-respondents. Examples of these items are in Appendix A. Numerous telephone calls were placed to institutions failing to respond to the follow-up letter.

Analysis of the Data

The data were compiled and tabulated in a manner designed to disclose findings related to the purpose and objectives of the study. Since the research effort was primarily of a descriptive nature, statistics such as frequencies, ranges, rankings, percentages, and mean responses were selected as appropriate means of describing the findings.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The primary purpose of this chapter is to present and analyze the data compiled on equine education programs at colleges and universities throughout the United States. This study described the different course offerings, techniques of administering programs, and selected characteristics of their programs.

After the data was collected through a mailed-type instrument, it was tabulated and analyzed to describe the findings. Since this research effort was primarily of a descriptive nature, only descriptive statistics were applied to the findings.

Description of Population and Response Patterns

The population of this study consisted of the colleges and universities in the nation which had at least one course offered in equine education. Table II shows the distribution of the population and the returns.

The institutions studied totaled 119 with 95 respondents. Seven of the 95 responded only by stating "no program," therefore data were compiled from 88 usable responses.

TABLE II

SUMMARY OF RESPONSES TO INSTRUMENT

	Distribution	
	No.	%
Instruments Mailed	119	100
Returns	95	80
Responded - No Program	7	6
Non-Respondents	24	20
Total Usable Returns	88	74

In the 88 returned questionnaires, credit hours of course offerings varied a great deal. Many respondents only offered one course or a limited number of courses, while others reported a group of course offerings or a planned program in some instances. The writer felt it was necessary to distinguish between these institutions. Since most colleges and universities consider 12 semester hours equivalency as a full teaching load, the writer felt the most logical separation point to distinguish between major and minor programs was at 12 semester hours.

In Table III, respondents with 12 semester hours (18 quarter hours) or more were considered "major programs," while institutions reporting lesser offerings were considered "minor programs." All reporting on

the quarter system were converted to semester equivalency by multiplying total number of quarter hours by the factor two-thirds. A complete listing of responding institutions categorized by type of program appears in Appendix B.

A summary of responses in Table III reveals 40 (45.5%) respondents classified as minor programs and 48 (54.5%) as major programs. A range of 1-66 hours was reported. Frequencies were concentrated greatest in the two and three hour offerings with 9 (10.2%) each and followed by 14 (15.9%) institutions reporting fifteen through seventeen hours. Twenty-seven (30.7%) reported five or less hours of courses offered directly related to equine education, while 10 (11.4%) offered thirty hours or more.

Figure I identifies the geographical location of responding institutions by type of program. Forty-two states were represented within the continental United States. Two states had six reporting, two had five, and the remainder ranged from four to one. Reporting states averaged 2.09 usable respondents per state.

Findings of the Study

Institutional, State and Area Information

Analysis of data in Table IV indicates a greater number of institutions ranked beef as being of the highest economic importance in the livestock industry in their area. Many areas included the entire state while others represented general localities. Beef was easily classified first as 67 (76.1%) placed it in their top three rankings.

TABLE III

INSTITUTIONS REPORTING COURSE OFFERINGS IN EQUINE EDUCATION CATEGORIZED BY MAJOR AND MINOR PROGRAMS

	Semester Hours Equivalence	Number Institutions Offering	Cumulative Frequency	Percent	Cumulative Percent
Minor Programs	1	1	1	1.1	1.1
	2	9	10	10.2	11.4
	3	9	19	10.2	21.6
	4	5	24	5.7	27.3
	5	3	27	3.4	30.7
	7	3	30	3.4	34.1
	8	4	34	4.5	38.6
	9	3	37	3.4	42.0
	10	2	39	2.3	44.3
	11	1	40	1.1	45.5
Major Programs	12	3	43	3.4	48.9
	14	2	45	2.3	51.1
	15	5	50	5.7	56.8
	16	4	54	4.5	61.4
	17	5	59	5.7	67.0
	18	2	61	2.3	69.3
	19	1	62	1.1	70.5
	20	1	63	1.1	71.6
	21	1	64	1.1	72.7
	22	4	68	4.5	77.3
	23	1	69	1.1	78.4
	24	3	72	3.4	81.8
	25	1	73	1.1	83.0
	26	1	74	1.1	84.1
	27	2	76	2.3	86.4
	28	2	78	2.3	88.6

TABLE III (Continued)

	Semester Hours Equivalence	Number Institutions Offering	Cumulative Frequency	Percent	Cumulative Percent
Major Programs (Continued)	30	2	80	2.3	90.9
	34	1	81	1.1	92.0
	36	2	83	2.3	94.3
	38	1	84	1.1	95.5
	51	1	85	1.1	96.6
	64	1	86	1.1	97.7
	66	2	88	2.3	100.0

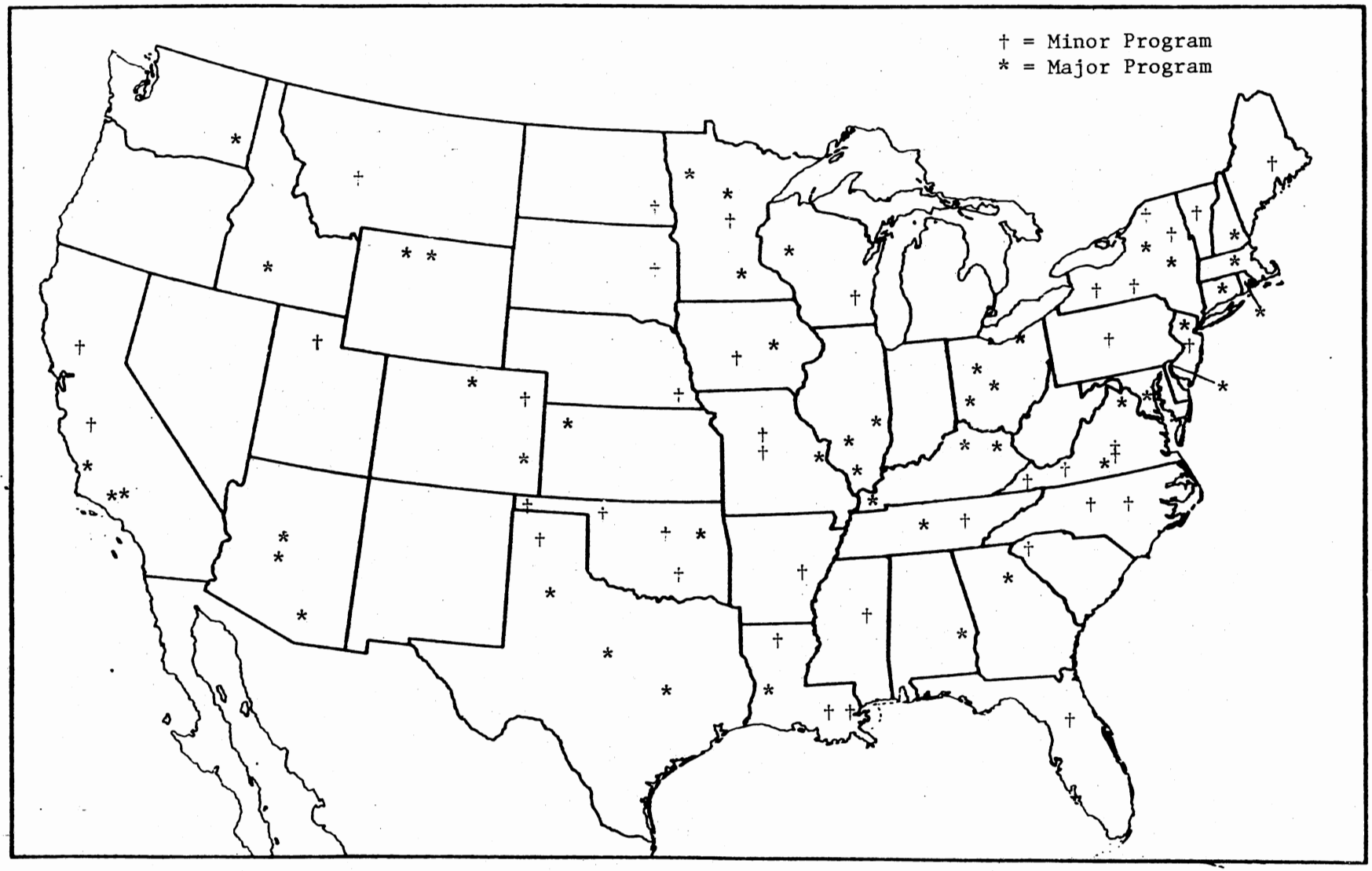

Figure 1. Geographical Location of Responding Institutions by Type of Program

TABLE IV

LIVESTOCK ENTERPRISES RANKED BY ECONOMIC IMPORTANCE
(ALL PROGRAMS)

Enterprise	Number of Institutions by Rank Category						Average Rank	Overall Rank
	1	2	3	4	5	6		
Beef	45	12	10	10	1	1	1.90	1
Dairy	18	24	24	8	4	0	2.44	2
Horses	3	18	15	17	17	5	3.55	3
Swine	5	15	14	16	14	13	3.75	4
Poultry	8	9	11	16	18	11	3.82	5
Sheep	0	2	4	6	19	42	5.58	6

Dairy followed as second in priority by having 66 (75.0%) classifications in the top three but only 18 (20.5%) as the top choice, compared to 45 (51.1%) for beef. Swine and horses were very close in the third ranking. Swine was ranked first on 5 (5.7%) as compared to 3 (3.4%) for horses. Due to the fact horses received 67 (76.1%) rankings of 2 through 5 and swine received 59 (67.0%), horses were placed third in the overall rankings and swine fourth. Fifth and sixth rankings were assigned to poultry and sheep respectively.

Inspection of Table V indicates the more traditional uses of horses. A summary of responses in Table V reveals 79 (89.7%) responses indicating pleasure/hobby as being the basic nature of the horse industry in

their area. Showing was listed by 57 (64.8%), breeding and management by 51 (58.0%) and racing by 43 (48.9%). "Other" classifications revealed 13 (14.8%) responses which included a combination of the above as well as general ranch work.

TABLE V

BASIC NATURE OF HORSE INDUSTRY BY RESPONDING INSTITUTIONS
(ALL INSTITUTIONS)

Nature of Industry	Distribution By Size of Institution											
	Less 5,000		5,000-10,000		11,000-15,000		16,000-20,000		More 20,000		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Pleasure/ Hobby	26	29.5	15	17.0	9	10.2	10	11.4	19	21.6	79	89.7
Showing	18	20.5	13	14.8	6	6.8	5	5.7	15	17.0	57	64.8
Breeding and Management	18	20.5	6	6.8	6	6.8	7	8.0	14	15.9	51	58.0
Racing	12	13.6	7	8.0	5	5.7	5	5.7	14	15.9	43	48.9
Other	7	8.0	0	0	2	2.3	0	0	4	4.5	13	14.8

In analyzing the basic nature of the horse industry compared by institution size, all categories ranked pleasure/hobby first, followed by showing, breeding and management, racing, and other. The only

duplication or variance in the norm in rankings existed between breeding and management and showing. In each category, the highest concentration of responses occurred in institutions with enrollment less than 5,000 and more than 20,000 students.

Table VI was developed to present the demand for horse programs by type of program and size of institution. The data reveal the greatest demand for equine education at the post secondary level and in 4-H programs. Fifty-four (61.4%) respondents stated these two categories were of major significance in demands for education. On-farm workers were selected by 14 (15.9%) and area vocational classes by 10 (11.4%). Continuing education courses were the main source of demand for education not listed on the instrument. Again, institutions with enrollment less than 5,000 and more than 20,000 students showed greater concentration in demand for equine education programs.

Academic Opportunities and Extra Curricular Activities

Academic opportunities offered by programs are reported in Table VII. Inspection of the data reveals 96.6% of the programs offer horse science as part of a particular curriculum. Very little difference was reported between minor and major programs with 97.5% of the minor programs and 95.8% of the major programs reporting in this manner.

Providing the student the opportunity for practical application in conjunction with technical material taught was included as a type of offering in 80.7% of the programs. The opportunity was offered in 91.7% of the major programs as compared to 67.5% of the minor programs. This made for a difference of 24.2%.

TABLE VI

DEMAND FOR EQUINE EDUCATION BY RESPONDING INSTITUTIONS
(ALL INSTITUTIONS)

Type of Program	Distribution By Size of Institution											
	Less 5,000		5,000-10,000		11,000-15,000		16,000-20,000		More 20,000		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Post Secondary	16	18.9	9	10.2	4	4.5	7	8.0	18	20.5	54	61.4
4-H Programs	13	14.8	11	12.5	7	8.0	5	5.7	18	20.5	54	61.4
On Farm Workers	5	5.7	2	2.3	0	0	2	2.3	5	5.7	14	15.9
Area Vocational Classes	3	3.4	1	1.1	1	1.1	1	1.1	4	4.5	10	11.4
Other	5	5.7	2	2.3	0	0	0	0	4	4.5	11	12.5

TABLE VII

ACADEMIC OPPORTUNITIES BY RESPONDING PROGRAMS

Type of Academic Offering	Minor Programs %	Major Programs %	Total Programs %
1. Offering classes in horse science as a part of a particular curriculum	97.5	95.8	96.6
2. Including the teaching of horse science in other related courses such as horse nutrition.	67.5	81.2	75.0
3. Providing the student the opportunity for practical application in conjunction with technical material taught.	67.5	91.7	80.7
4. Providing opportunity for internships or apprenticeships with horses.	42.5	79.2	62.5
5. Offering equitation as a part of horse science courses.	45.0	75.0	60.2
6. Offering a preveterinary program.	62.5	60.4	61.4
7. Conducting research using horses.	37.5	37.5	37.5
8. Having a horse breeding program.	42.5	70.8	58.0

Totally, three out of four respondents reported horse science taught in other related courses, such as horse nutrition in animal nutrition. Major programs again surpassed minor programs with 81.2% compared to 67.5%.

Providing opportunity for internships or apprenticeships with horses showed the greatest spread in academic opportunities between minor and major programs. Of the minor programs, 42.5% reported whereas with major programs, the figure was 79.2%. Overall there was a total of 62.5% responses to this offering. Offering a preveterinary program as well as offering classes in horse science as part of a particular curriculum were the only two instances where minor programs surpassed major programs in providing academic opportunities. The margins between the two groups were very small in both cases. Preveterinary programs were offered in 61.4% of the total programs. Minor programs reported 62.5% and major 60.4%.

Offering equitation as part of horse science courses revealed a wide spread between programs as did providing opportunities for internships or apprenticeships. A total of 60.2% of the programs offered equitation, while three out of four major programs were involved in this way as compared to less than half of the minor programs.

Over 50% of the responding institutions reported having breeding programs. Again, a major difference was evident between the two program groups. Of the major programs, 70.8% reported such while 42.5% of the minor programs had breeding programs.

Research using horses was categorized by itself. This opportunity was available in 20.5% less of the total programs than conducting a

breeding program which was next to lowest in the ranking. Of both minor and major programs 37.5% reported conducting research using horses.

In analyzing responses in Table VIII, the most prominent extra curricular activity was allowing the students to sponsor horse shows and/or rodeos. A total of 88.6% of total programs responding allowed students to sponsor these activities. The major programs figure reported was 93.8% as compared to 82.5% for minor programs.

TABLE VIII

EXTRA CURRICULAR ACTIVITIES BY RESPONDING PROGRAMS

Type of Activity	Minor Programs %	Major Programs %	Total Programs %
1. Allowing students to sponsor horse shows and/or rodeos.	82.5	93.8	88.6
2. Sponsoring a rodeo team	37.5	50.0	44.3
3. Sponsoring an intercollegiate show team	30.0	52.1	42.0
4. Sponsoring a horse judging team	37.5	64.6	52.3
5. Offering a summer youth program for secondary and/or elementary students.	22.5	41.7	33.0
6. Providing a riding program for the handicapped	2.5	20.8	12.5
7. Offering judging clinics for youth organizations such as 4-H and FFA.	70.0	64.6	67.0
8. Other	12.5	41.7	28.4

Offering judging clinics for youth organizations such as 4-H and FFA was the only activity where the minor programs reported a higher percentage than the major category. This activity was available in 70.0% of the minor program respondents compared to 64.6% in major programs. A total of 67.0% responses were reported.

Sponsoring a horse judging team concluded the listing of activities available in over 50% of the programs. Reporting a 52.3% total, the major programs percentage was 64.6 and the minor group was 37.5%. This made for a difference of 27.1%

Sponsoring a rodeo team and an intercollegiate show team were very close in total responses. Rodeo teams were made available 2.3% more often than intercollegiate show teams. The reported totals were 44.3% compared to 42.0%. The spread between minor and major programs was greater in relation to intercollegiate show teams by 9.6%. Intercollegiate show teams were available 52.1% of the time in major programs and 30.0% in minor programs. Rodeo teams existed in 50.0% of major programs and in 37.5% of the minor programs.

Offering a summer youth program for secondary and/or elementary students was available 33.0% of the time. Major programs again surpassed minor programs 41.7% to 22.5%.

An activity which ranked lowest in major programs and registered only once in the minor programs was a riding program for the handicapped. A total response figure of 12.5% was comprised of 20.8% major and 2.5% minor programs.

Other activities included clinics, continuing education, and polo as the major listings. Major programs were again involved much greater

in these activities than minor programs by a 41.7% to 12.5% margin. Other activities were available in 28.4% of the total.

Curriculum and Related Factors

Table IX analyzes programs by major objectives. The results conclude the objective to provide students with a fundamental background in horse management had the greatest total responses of 55 (62.5%). This objective led the minor programs in responses with 34 (85.0%), but ranked fifth in the major programs with 21 (43.8%).

The objective to provide training for students entering horse related careers, along with the objective to enhance students personal enjoyment, was second highest in total responses with 48 (54.5%). Major programs responded almost three times more often than minor programs with 35 (72.9%) compared to 13 (32.5%) responses for minor programs.

In similar fashion, 48 (54.5%) programs responded with to enhance students personal enjoyment as being an objective. Minor and major programs responded with 25 (62.5%) and 23 (47.9%) responses respectively.

To provide horse courses as a part of the animal science curriculum was also among the leaders in responses. Twenty-five (62.5%) of the minor programs and 22 (45.8%) of the major programs responded as this being an objective. This gave for a total of 47 (53.4%) responses.

The objective to prepare students for a career in equine science had many of the same characteristics as the objective to provide training for students entering horse related careers. Major programs

TABLE IX

MAJOR OBJECTIVES OF RESPONDING EQUINE PROGRAMS

Objectives	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
	No.	%	No.	%	No.	%
To prepare students for a career in equine science	12	30.0	30	62.5	42	47.7
To provide training for students entering horse related careers	13	32.5	35	72.9	48	54.5
To provide students with a fundamental background in horse management	34	85.0	21	43.8	55	62.5
To prepare students to continue in advanced study toward a higher degree	24	60.0	8	16.7	32	36.4
To provide horse courses as a part of the animal science curriculum	25	62.5	22	45.8	47	53.4
To enhance students personal enjoyment	25	62.5	23	47.9	48	54.5
Other	4	10.0	1	2.1	5	5.7

reported a total of 30 (62.5%) responses compared to 12 (30.0%) responses for the minor. A composite of 42 (47.7%) responses were reported.

The lowest number of responses was given to the objective to prepare students to continue in advanced study toward a higher degree. Eight (16.7%) major programs and 24 (60.0%) minor programs included this as an objective to give a total of 32 (36.4%) responses.

Findings presented in Figure 2 show the number of years of existence among horse programs. Eighty seven total responses gave a mean of 13.09 years with a range of 1-53 years. The mode was six years with 14 programs in at least their sixth year of existence. The median years of existence was seven.

Table X reveals animal science as the academic department most often offering equine courses as part of their curriculum. A total of 60 (68.2%) responded in this category. Of these minor programs accounted for 30 (75.0%) while major programs also had 30, but a lower percentage of 62.5%. "Other" departments were second with 14 (15.9%) responses which included agriculture and equine science or equestrian studies. Major programs represented 10 (20.8%) and minor 4 (10.0%) of these responses. Physical education was about equally represented by major programs with 6 (12.5%) and minor programs with 5 (12.5%) from a total of 11 (12.5%) programs. Only one (2.5%) minor program listed recreation.

Seventy-two (81.9%) institutions responded concerning enrollment of the department in which their horse education program was located. The mean was 324.1 with a range of 20-3300 students.

Inspection of data in Table XI showed hunt seat, followed closely by stock seat as the types of riding most widely taught. Hunt seat

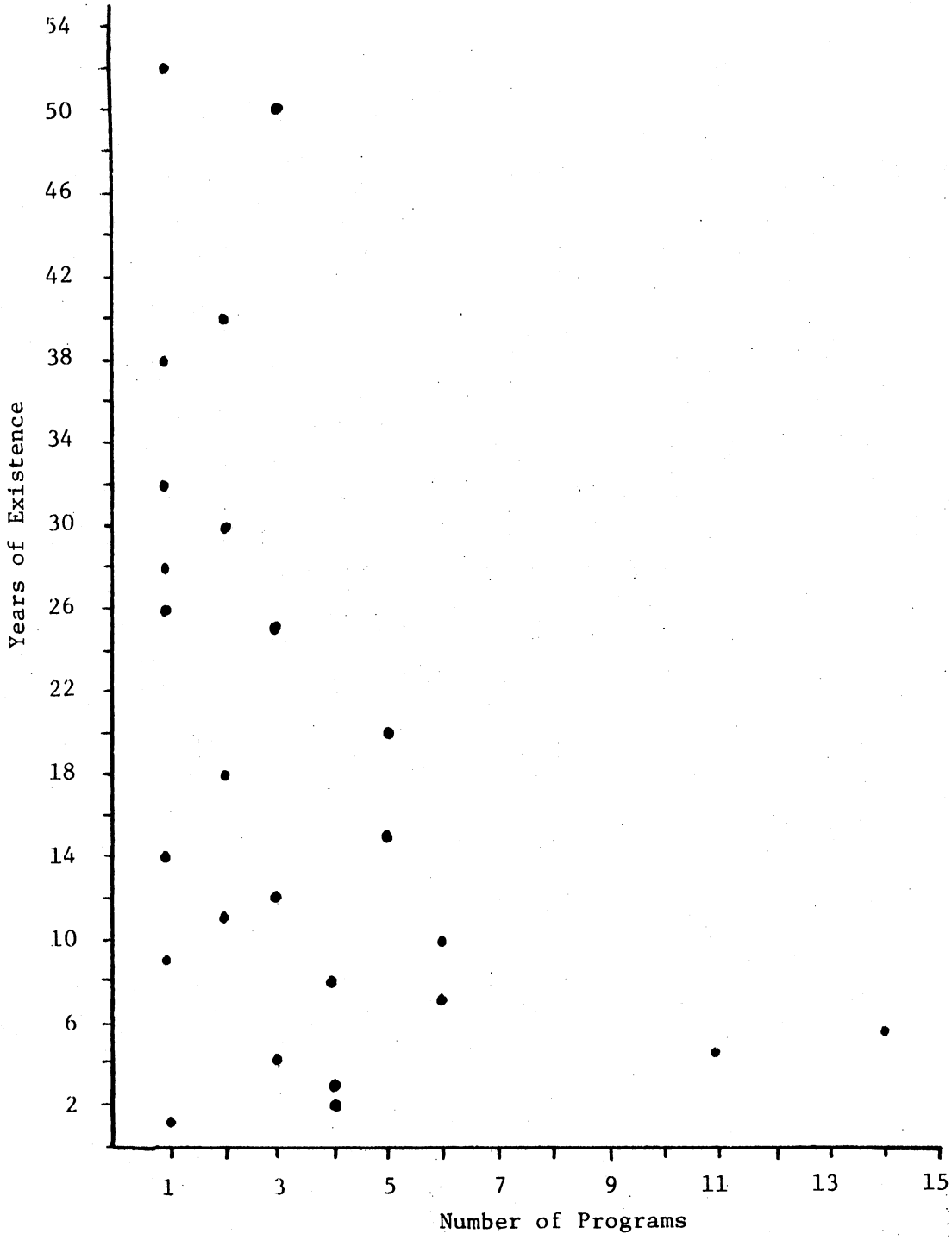

Figure 2. Years Programs in Existence at Responding Institutions

TABLE X

ACADEMIC DEPARTMENTS OFFERING EQUINE COURSES BY RESPONDING PROGRAMS

Department	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
	No.	%	No.	%	No.	%
Animal Science	30	75.0	30	62.5	60	68.2
Recreation	1	2.5	0	0.0	1	1.1
Physical Education	5	12.5	6	12.5	11	12.5
Other	4	10.0	10	20.8	14	15.9

TABLE XI

PROGRAM EMPHASIS PLACED ON TYPE OF RIDING

Type Riding	Distribution by Type Program					
	Minor N=40		Major N=48		Total	
	No.	%	No.	%	No.	%
Stock Seat	17	42.5	28	58.3	45	51.1
Hunt Seat	16	40.0	32	66.7	48	54.5
Saddle Seat	7	17.5	15	31.3	22	25.0
Other	1	2.5	13	27.1	14	15.9
Riding Not Taught	12	30.0	7	14.6	19	21.6

was taught in 48 (54.5%) of the programs compared to 45 (51.1%) having taught stock seat. Stock seat was taught by 17 (42.5%) of the minor programs and hunt seat by 16 (40.0%). The trend reversed slightly in major programs as 32 (66.7%) taught hunt seat and 28 (58.3%) stock seat.

Saddle seat ranked third in total number as type of riding most widely taught. Twenty-two (25.0%) responded with 7 (17.5%) minor programs and 15 (31.3%) major programs. Other types of riding listed included jumping, cross country, packing, and balanced seat. Only 1 (2.5%) minor program and 13 (27.1%) major programs included other types. A total of 14 (15.9%) respondents placed emphasis on other types of riding than stock, hunt, and saddle seat.

Nineteen (21.6%) responded as not offering any type of riding. Minor programs accounted for 12 (30.0%) and major, 7 (14.6%) from a total of 19 (21.6%) responses.

Table XII was developed to show the emphasis of curriculum in horse programs. Both management and equitation were highlighted as being the major curriculum emphasis by total programs responding, but this did not hold true for minor programs standing alone.

Management and equitation were listed for 45 (51.1%) programs as being the curriculum emphasis. This total was composed of 29 (60.4%) major programs and 16 (40.0%) minor. Management alone was emphasized by 35 (39.8%), with 21 (52.5%) minor programs and 14 (29.2%) major. Equitation alone was listed by 7 (8.0%) total programs being evenly distributed with 4 (8.3%) major and 3 (7.5%) minor programs.

Management courses listed most often were horse production, breeding and management, and farrier science. Total responses indicated

68 (77.3%) of all programs as having horse production, 41 (46.6%) breeding and management, and 23 (26.1%) farrier science.

TABLE XII

CURRICULUM EMPHASIS BY RESPONDING PROGRAMS

Type of Emphasis	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
	No.	%	No.	%	No.	%
Management	21	52.5	14	29.2	35	39.8
Equitation	3	7.5	4	8.3	7	8.0
Management and Equitation	16	40.0	29	60.4	45	51.1

Equine curriculums varied a great deal between open entry-open exit programs compared to tightly structured programs. Sixty-seven (76.1%) of the respondents replied concerning acceptance of applicants to equine programs. Forty-two of the 67 (62.7%) responded to 100% acceptance, the remainder accepted less than the number making application.

As determined by the summary of data presented in Figure 3, horse related industry was indicated most often in responses concerning placement of graduates. Major and minor programs were consistent in

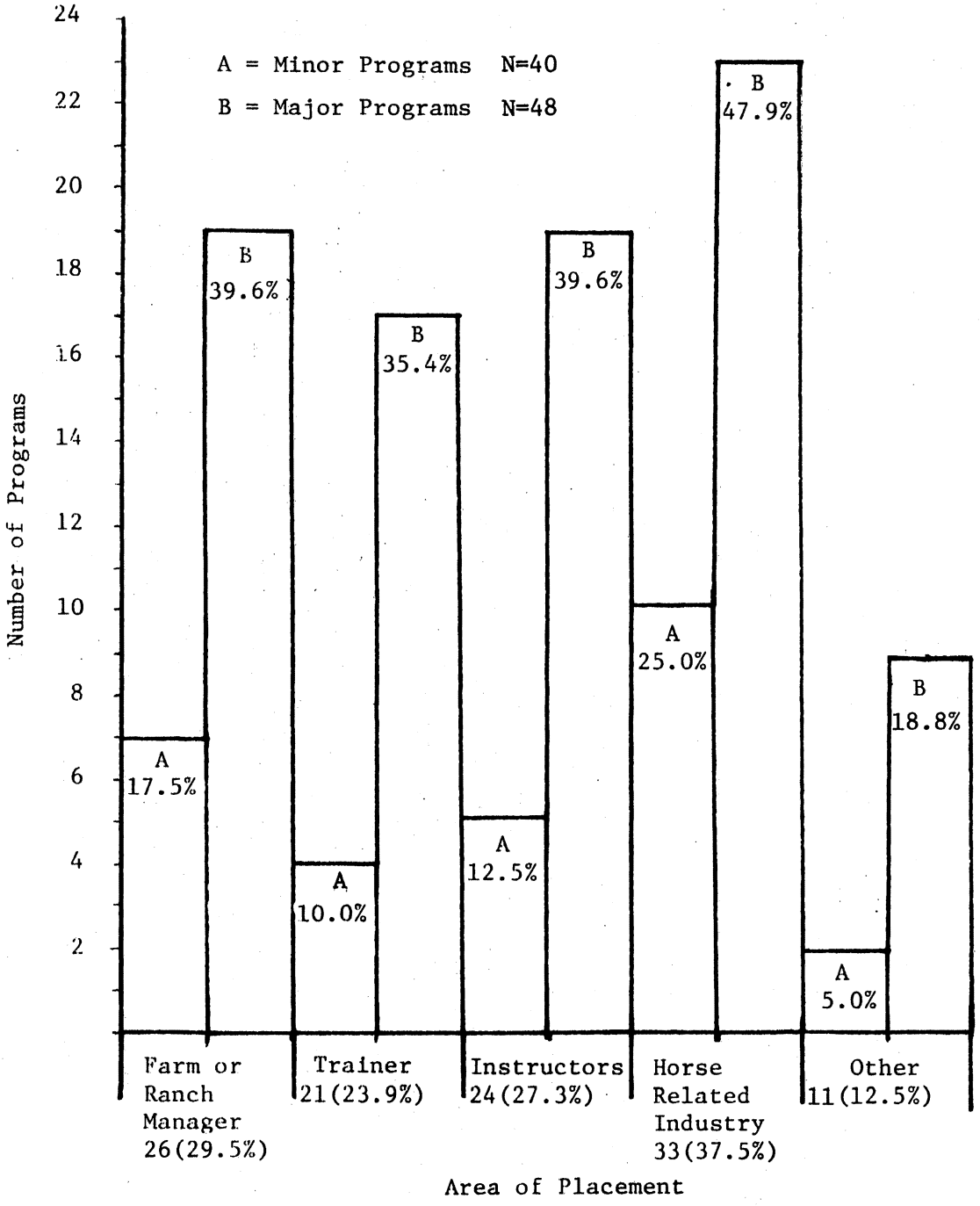

Figure 3. Placement of Graduates by Responding Programs

responses of highest placement to lowest. Horse related industry led the responses with 33 (37.5%) total, comprised of 23 (47.9%) major and 10 (25.0%) minor programs.

Very little difference existed between the farm and ranch manager, instructor, and trainer. Nineteen (39.6%) of the major programs indicated farm and ranch manager and instructor as a source of placement for their graduates. Farm and ranch managers were listed by 7 (17.5%) and instructors by 5 (12.5%) in minor programs. A total of 26 (29.5%) indicated the farm and ranch manager while 24 (27.3%) selected instructor. Trainers were close with 21 (23.9%) responding comprised of 17 (35.4%) major programs and 4 (10.0%) minor. Other types of placement were indicated by a total of 11(12.5%) which included breeding farms, race tracks, and private stables.

Findings presented in Table XIII show the mean and range of enrollment in lecture and riding classes by type of program. Lecture classes revealed a mean enrollment of 38.4 with a range of 6-99 students, and riding classes a mean of 17.7 with a range of 4-99 students. Minor programs showed the larger mean in both cases, with 41.6 enrolled in lecture and 24.0 in riding classes. Major programs responded with a mean enrollment of 35.5 in lecture classes and 14.4 in riding classes. Range of lecture classes for minor programs revealed 15-99 students compared to 6-99 students for major programs. Riding classes showed a range of 8-99 students for minor programs and 4-52 for major programs.

TABLE XIII

ENROLLMENT IN EQUINE EDUCATION CLASSES BY RESPONDING PROGRAMS

Type of Class	$\bar{X}$ by Type Program			Range by Type Program		
	Minor Programs	Major Programs	Total Programs	Minor Programs	Major Programs	Total Programs
Lecture	41.6	35.5	38.4	15-99	6-99	6-99
Riding	24.0	14.4	17.7	8-99	4-52	4-99

Breeds and Uses of Horses

Table XIV provides a summary of breeds of horses used for riding in equine programs. The American Quarter Horse was used more than any other breed, followed by grade and Thoroughbred. This trend was also true concerning minor and major programs individually. Although the rankings varied slightly between minor and major programs, the total rankings concluded with Morgan fourth followed by Arabian, American Saddle Bred, Appaloosa, and other breeds, respectively. The total horses used for riding in minor programs was 507 by 23 programs for a mean of 22.0. Major programs reported using 1622 horses in 35 programs for a mean of 46.3. This study revealed a total of 2129 horses used for riding in 58 programs resulting in a mean of 36.7 horses per program.

Data in Table XV also revealed the American Quarter Horse as the most popular horse used in breeding programs by more than a 3-1 margin. A total of 43 institutions reported breeding programs. Thoroughbreds were second followed by Arabian, Morgan, grade, American Saddle Bred,

TABLE XIV

BREEDS OF HORSES USED FOR RIDING BY RESPONDING PROGRAMS

Breeds	Minor Programs			Major Programs			Total Programs		
	No. Programs N=23	No. Horses	$\bar{X}$	No. Programs N=35	No. Horses	$\bar{X}$	No. Programs N=58	No. Horses	$\bar{X}$
American Saddle Bred	3	26	8.7	15	75	5.0	18	101	5.6
American Quarter Horse	23	208	9.0	29	675	23.3	52	883	17.0
Appaloosa	11	29	2.6	15	52	3.5	26	81	3.1
Arabian	8	17	2.1	16	86	5.4	24	103	4.3
Morgan	3	7	2.3	14	103	7.4	17	110	6.5
Tennessee Walking Horse	0	0	0.0	6	29	4.8	6	29	4.8
Thoroughbred	7	33	4.7	30	266	8.9	37	299	8.1
Grade	11	185	16.0	24	280	11.7	35	465	13.3
Other	2	2	1.0	9	56	6.2	11	58	5.3
Total		507	22.0		1622	46.3		2129	36.7

TABLE XV

BREEDS OF HORSES USED FOR BREEDING BY RESPONDING PROGRAMS

Breeds	Minor Programs			Major Programs			Total Programs		
	No. Programs N=16	No. Horses	$\bar{X}$	No. Programs N=27	No. Horses	$\bar{X}$	No. Programs N=43	No. Horses	$\bar{X}$
American Saddle Bred	3	24	8.0	8	19	2.4	11	43	3.9
American Quarter Horse	18	293	16.3	26	457	17.6	44	750	17.0
Appaloosa	0	0	0.0	5	8	1.6	5	8	1.6
Arabian	3	8	2.7	5	58	11.6	8	66	8.3
Morgan	1	20	20.0	5	41	8.2	6	61	10.2
Tennessee Walking Horse	0	0	0.0	2	21	10.5	2	21	10.5
Thoroughbred	4	63	15.8	17	148	8.7	21	211	10.0
Grade	2	21	10.5	2	31	15.5	4	52	13.0
Other	2	35	17.5	5	32	6.4	7	67	9.6
Total		464	29.0		815	30.2		1279	29.7

Tennessee Walking Horse, Appaloosa, and in some instances ponies. Major and minor programs agreed on the American Quarter Horse and Thoroughbred respectively, but slight discrepancies existed with the ramining rankings. Major programs indicated 815 horses in 27 programs with a mean of 30.2. Minor programs showed 464 horses in 16 programs with a mean of 29.0. This resulted in a composite total of 1279 horses used for breeding in 43 programs to produce a mean of 29.7.

Data in Table XVI continues to support the American Quarter Horse as the breed most widely used in both major and minor programs. Horses used for purposes other than riding and breeding were reported as a total of 763 horses in 34 programs for a mean of 21.6. Minor programs exceeded major programs in this category. Minor programs indicated 488 horses used in 14 programs for a mean of 34.9 compared to 275 horses in 20 major programs for a mean of 13.8.

A summary of responses in Table XVII reveals 2958 horses owned by 72 programs for a mean of 41.1. Major programs owned 1624 horses at 38 locations for a mean of 42.7. Minor program ownership totaled 1334 horses at 34 programs resulting in a mean of 39.2.

As presented in Table XVIII, 44 (50.0%) programs owned stallions of breeding age. Thirty-two (72.7%) programs owning stallions made them available for breeding to mares not owned by the program. Major programs revealed 25 (52.1%) of those programs owned stallions of breeding age and 20 (80%) of those were made available to outside mares. Minor programs responded with 19 (47.5%) owning stallions and 12 (62.2%) stood their stallions to outside mares.

TABLE XVI

BREEDS OF HORSES USED FOR PURPOSES OTHER THAN RIDING AND BREEDING BY RESPONDING PROGRAMS

Breeds	Minor Programs			Major Programs			Total Programs		
	No. Programs N=14	No. Horses	$\bar{X}$	No. Programs N=20	No. Horses	$\bar{X}$	No. Programs N=34	No. Horses	$\bar{X}$
American Saddle Bred	2	2	1.0	1	5	5.0	3	7	2.3
American Quarter Horse	11	155	14.1	14	110	7.9	25	265	10.6
Appaloosa	1	2	2.0	4	5	1.3	5	7	1.4
Arabian	1	2	2.0	3	23	7.7	4	25	6.3
Morgan	3	58	19.3	4	15	3.8	7	73	10.4
Tennessee Walking Horse	0	0	0.0	0	0	0.0	0	0	0.0
Thoroughbred	3	40	13.3	11	63	5.7	14	103	7.4
Grade	5	110	22.0	1	7	7.0	6	117	19.5
Other	2	119	59.5	4	47	11.8	6	166	27.7
Total		488	34.9		275	13.8		763	21.6

TABLE XVII

INSTITUTIONAL HORSE POPULATION BY TYPE OF PROGRAM

Type Program	Total Number of Programs	Total Horses Owned	Average Horses Owned
Minor Programs	34 (85.0%)	1334	39.2
Major Programs	38 (79.2%)	1624	42.7
Total Programs	72 (81.8%)	2958	41.1

TABLE XVIII

INSTITUTIONS OWNING STALLIONS OF BREEDING AGE BY TYPE OF PROGRAM

Type Program	Programs Owning Stallions	% of Population	Programs Owning Stallions and Standing to Outside Mares	% of Population Owning Stallions
Minor Programs N=40	19	47.5	12	62.2
Major Programs N=48	25	52.1	20	80.0
Total Programs N=88	44	50.0	32	72.7

Availability of Facilities

A summary of responses in Figure 4 reveals facilities available for program use. With the exception of a slight difference in availability of classroom area, major programs indicated more facilities in every category. Stabling, pasture and outdoor arena form a distinct group in terms of availability as did indoor arena, breeding facilities and trails.

Responses summarized in Table XIX reveal 87 (98.9%) responded to location of facilities. Thirty-six indicated facilities off campus with a mean of 7.1 miles and a range of 1-25 miles. For both types of programs, the bulk of the facilities were located on campus.

TABLE XIX

LOCATION OF FACILITIES AT RESPONDING INSTITUTIONS

	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
Location	Number	%	Number	%	Number	%
On Campus	25	62.5	26	54.2	51	58.0
Off Campus	16	40.0	20	41.7	36	40.9

Note: One minor program responded as having facilities both "on campus" and "off campus". Two major programs failed to respond.

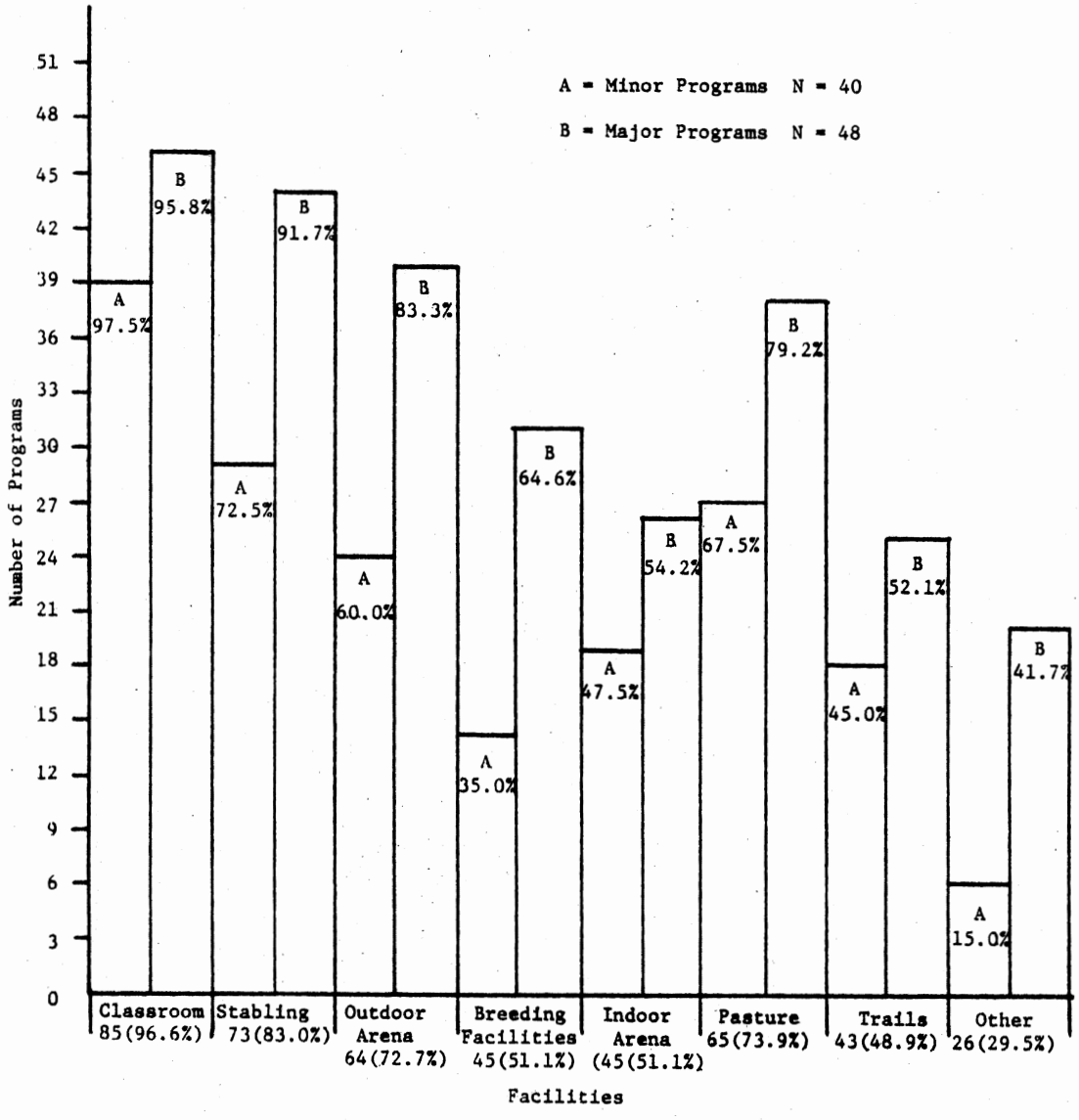

Figure 4. Facilities Available for Use by Responding Programs

In reporting facility availability, Table XX reveals private stabling for student owned horses is more prevalent in major programs than minor. Fifteen (37.5%) minor programs responded as having facilities available to students with an average monthly cost of $51.43 or full board for an average of $129.58. Of the major programs responding, 20 (41.7%) reported such facilities with an average monthly cost of $67.78 and full board of $107.50. A total of 35 (39.8%) made these facilities available to students at an average monthly charge of $60.63 or full board at $113.97.

TABLE XX

STATUS OF FACILITIES BY RESPONDING PROGRAMS

	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
	Number	%	Number	%	Number	%
Private Stabling for Students	15	37.5	20	41.7	35	39.8
Plans for Expansion	16	40.0	28	58.3	44	50.0
Most Needed						
Indoor Arena	12	30.0	16	33.3	28	31.8
Stabling	12	30.0	7	14.6	19	21.6
More Space	1	2.5	5	10.4	6	6.8
Other	10	25.0	15	31.3	25	28.4

Forty-four (50.0%) programs reported having immediate plans for expansion. Major programs reported a greater number of responses to this than minor programs. Twenty-eight (58.3%) of the major programs and 16 (40.0%) of the minor ones were making plans for immediate expansion.

The most needed facilities listed were indoor arena and stabling. Space and land were indicated by six (6.8%) respondents and other facilities included laboratory facilities, research facilities, transportation, hunt course and storage.

Program Funding

Inspection of Table XXI reveals state funds as the major source of funding for equine programs. Thirty (75.0%) minor and 34 (70.8%) major programs reported state funds for a total of 64 (72.7%). Proceeds from the sale of horses were reinvested into the program by 18 (45.0%) minor and 29 (60.4%) major programs for a total of 47 (53.4%). This ranked second behind state funds and immediately ahead of private donations. Tuition, student fees, and other sources concluded the listing. Other sources included donated stallion services, equipment and income from horse shows, rodeos, and clinics. Only seven (8.0%) programs indicated the rental of horses to students other than during class periods.

Additional cost to students for riding courses averaged $98.81 per semester for 26 respondents with a range of $15-$350. Quarter charge averaged $76.11 for nine respondents with a range of $25-$145. Many respondents indicated there was no additional charge for riding courses.

Analysis of Table XXII indicates donation of horses as the main support from horse industry. Thirty-five (72.9%) major programs

TABLE XXI

SOURCES OF PROGRAM FUNDING BY RESPONDING INSTITUTIONS

Source of Funds	Distribution by Type Program					
	N=40 Minor Programs		N=48 Major Programs		N=88 Total Programs	
	No.	%	No.	%	No.	%
State Funds	30	75.0	34	70.8	64	72.7
Sale of Horses	18	45.0	29	60.4	47	53.4
Private Donations	14	35.0	22	45.8	36	40.9
Student Fees	13	32.5	16	33.3	29	33.0
Tuition	11	27.5	22	45.8	33	37.5
Other	1	2.5	11	22.9	12	13.6

TABLE XXII

TYPES OF SUPPORT FROM HORSE INDUSTRY IN FUNDING EQUINE PROGRAMS

Type Support	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
	No.	%	No.	%	No.	%
Scholarships	0	0.0	12	25.0	12	13.6
Cash Donations	7	17.5	14	29.2	21	23.9
Donations of Horses	22	55.0	35	72.9	57	64.8
Grants Funding Special Projects	5	12.5	14	29.2	19	21.6
None	12	30.0	7	14.6	19	21.6
Other	3	7.5	7	14.6	10	11.4

received donations of horses as did 22 (55.0%) of the minor programs to comprise a total of 57 (64.8%) programs. A wide margin existed between the main support of horse donations and cash donations. Total programs receiving cash donations numbered 21 (23.9%), of these major programs reported 14 (29.2%) and minor programs 7 (17.5%). Grants funding special projects were more prominent in major programs than minor programs. Nineteen (21.6%) responded to receiving some grant support. Scholarships were indicated by 12 (25.0%) of the major programs but minor programs did not register this as a type of support. Other types of support indicated were internships and donations of equipment.

Twelve (30.0%) of the minor programs and seven (14.6%) major programs reported support was not received in any form from the horse industry. This category totaled 19 (21.6%) programs.

Faculty and Staff Data

Data in Table XXIII indicate age, years of practical experience, and salary of the faculty in responding programs. The data, categorized by faculty position and type of program, report both total number of faculty and mean responses.

Faculty age in total programs ranged from a mean of 51 for professors to 29 for instructors. Directors of equine programs polled a mean of 31 years of age for both minor and major programs. Years of practical experience again revealed the range between professors and instructors. Professors reported average years of practical experience at 29 in contrast to instructors and "other" category at 14 years. Salary range included similar results as professors showed

TABLE XXIII

SUMMARY OF FACULTY DATA AS TO AGE, YEARS OF PRACTICAL EXPERIENCE, AND MONTHLY SALARY BY FACULTY POSITION AND TYPE OF PROGRAM

Faculty Position	$\bar{X}$ Years of Age						$\bar{X}$ Years of Practical Experience						$\bar{X}$ Monthly Salary					
	Minor Programs		Major Programs		Total Programs		Minor Programs		Major Programs		Total Programs		Minor Programs		Major Programs		Total Programs	
	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$	No.	$\bar{X}$
Professor	14	53	11	48	25	51	13	31	12	27	25	29	9	$1867	10	$2004	19	$1958
Associate Professor	11	40	13	35	24	37	8	19	15	17	23	17	7	1729	9	1911	16	1831
Assistant Professor	5	37	9	42	14	40	5	21	9	28	14	25	3	1633	4	1875	7	1771
Instructor	3	32	48	29	51	29	3	8	51	14	54	14	3	1000	41	1054	44	1050
Director	5	31	3	31	8	31	5	17	3	21	8	19	4	1675	2	1700	6	1683
Veterinarian	3	41	3	40	6	40	3	26	3	23	6	24	1	1750	2	2050	3	1950
Other	11	38	13	36	24	37	10	12	15	15	25	14	5	1120	10	1300	15	1240

the highest mean of $1958 per month while instructors reported $1050.

Approximately 34% of the faculty in total programs were ranked as instructors with large concentrations in major programs. Sixteen percent were ranked equally as professors, associate professors, and "other" category. Assistant professors represented 9% of total faculty positions, directors 5% and veterinarians 4%.

Seventy-nine (89.8%) programs responded to the number of full time equivalent positions (other than faculty) directly related with the horse program. The mean response was 1.85 with a range of 0-10 positions. Thirty-eight (43.2%) respondents indicated the use of graduate assistants while 40 (45.5%) indicated graduate assistants were not used.

Table XXIV data reveal degrees held by the faculty in responding programs. Fifty-six (33%) of total faculty held doctorate degrees while 49 (29%) held bachelors degrees and 46 (27%) had masters degrees. Six faculty members held Doctor of Veterinary Medicine degrees and 8 (5%) did not have degrees.

The most prevalent degrees held by the faculty in minor programs were doctorates followed by masters and bachelors degrees respectively. The faculty in major programs held bachelors degrees most often followed by doctorates and masters. Although many programs had faculty devoting all of their time to the horse program, the general response was that a large number shared responsibilities with some other discipline. In the past, the training ground for instructors in equine education programs has come from the animal sciences, but today many are coming from institutions with strong emphasis in equine education.

TABLE XXIV

SUMMARY OF DEGREES HELD BY FACULTY IN RESPONDING PROGRAMS

Degree Held	Distribution by Type Program					
	Minor Programs		Major Programs		Total Programs	
	No.	%	No.	%	No.	%
Doctorate	26	49	30	26	56	33
Masters	17	32	29	25	46	27
Bachelors	7	13	42	37	49	29
D.V.M.	2	4	4	3	6	4
Associate	-	-	3	3	3	2
No Degree	1	2	7	6	8	5

Attitudes Toward and Status of Programs

Table XXV was developed to summarize the findings of attitudes toward and status of responding equine programs. Minor and major programs rated fifteen comparative factors from 1 (high) to 5 (low). The mean rating, by type of program, was presented for each comparative factor. A combined program mean rating and overall rank were also used to summarize the data.

Factors concerning student interest in equine programs for both educational and pleasure purposes followed by overall need for horse programs received the first three rankings. Need for expansion of programs ranked fourth followed by student interest for career preparation. The sixth ranking went to acceptability of horses in total animal science curricula. The next three rankings concerned support from departmental faculty, total institutional acceptability, and administrative support respectively. Support from area horse industry ranked tenth. The next three rankings were job availability for graduates, need for a degree in horse science and involvement of area horsemen in programs. The last two rankings concerned horse research interest and priority for research funds.

TABLE XXV

SUMMARY OF RESPONDENTS' ATTITUDES TOWARD AND STATUS OF EQUINE PROGRAMS BY COMPARATIVE FACTORS

Comparative Factor	X Rating by Type Program: Minor Programs (N=40) No.	$\bar{X}$[1]	Major Programs (N=48) No.	$\bar{X}$[1]	Combined Rating $\bar{X}$[1]	Overall Rank
1. Departmental Faculty Support	40	2.70	46	2.22	2.44	7
2. Administrative Support	40	3.13	47	2.28	2.63	9
3. Total Institutional Acceptability	39	2.69	46	2.54	2.61	8
4. Need for Program	40	2.03	46	1.61	1.78	2
5. Horse Research Interest	33	3.06	37	3.00	3.03	14
6. Priority for Research Funds	30	3.97	30	3.77	3.87	15
7. Student Interest in Horse Program	39	1.54	47	1.51	1.52	1
8. Job Availability in Horse Industry for Graduates	39	3.18	46	2.26	2.72	11
9. Involment of Area Horsemen in Operation of Program	36	3.28	46	2.72	2.96	13
10. Support from Area Horse Industry	34	3.03	44	2.36	2.65	10
11. Acceptability of Horses in Total Animal Science Curricula	36	2.67	40	1.95	2.29	6
12. Student Interest for Pleasure	40	1.53	47	2.21	1.90	3
13. Student Interest for Career Preparation	38	2.55	45	1.98	2.24	5
14. Need for a Degree in Horse Science	33	3.24	39	2.51	2.85	12
15. Need for Expansion of Your Program	39	2.23	47	2.21	2.22	4

[1] 1 = High; 5 = Low

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The primary purpose of this chapter is to present an abbreviated review of the study, its design and conduct, and the major findings. Also presented are conclusions and recommendations which were based on summarization of data collected.

Summary

Purpose of the Study

The main purpose of this study was to determine characteristics of equine education programs in colleges and universities in the United States. Growth of present programs and lack of information concerning these programs prompted this study.

Objectives of the Study

The objectives of this study were to:

1. Formulate a list of colleges and universities offering a course or courses in equine education.
2. Categorize and compare programs according to size as based on semester credit hour equivalency.
3. Classify institutional, state and area needs according to demands for educational programs and importance of industry.

4. Describe institutions direct extent of operational techniques and extra curricular activities associated with equine education programs.
5. Describe patterns of equine program offerings and develop a listing of courses in each offering.
6. Classify horses used in programs by breeds and uses.
7. Describe facilities according to availability and major need of each institution.
8. Identify sources of funding involving administration of each program.
9. Describe assignments, qualifications, training, and salary range of instructors.
10. Identify attitudes toward and status of equine education programs.

Design and Conduct of the Study

Mailed questionnaires were used as the instrument for collecting data. A questionnaire was mailed to each institution offering a minimum of one equine course in their curriculum.

A total of 119 questionnaires were mailed from which 95 responses were received. Seven responded "no program" resulting in 88 usable responses. Responding programs were classified as either minor programs or major programs. Minor programs included all institutions with less than 12 semester hours equivalency and major programs included institutions with 12 or more semester hours equivalency. Of the 88 responses, 48 were classified major and 40 minor.

This study was concerned with selected characteristics of equine education programs in colleges and universities. These characteristics included (1) institutional, state and area information, (2) academic opportunities and extra curricular activities, (3) curriculum and related factors, (4) breeds and uses of horses, (5) availability of facilities, (6) program funding, (7) faculty and staff data, (8) attitudes toward and status of programs.

Findings of the Study

Institutional, State and Area Information. The data collected revealed a greater concentration in horse education programs at opposite ends of the enrollment spectrum. Small schools (less than 5,000 students) and large schools (more than 20,000 students) reported a combined total of 58% of the horse programs.

Horses were given an overall rank of third in economic importance in the livestock industry preceeded by beef and dairy cattle. Swine was a close fourth followed by poultry and sheep.

Pleasure/hobby use ranked the highest in reference to the basic nature of horse enterprises composing the industry followed by showing, breeding and management, and racing respectively.

The greatest demand for equine education was dominated by post secondary level educational programs and 4-H programs.

Academic Opportunities and Extra Curricular Activities. Equine course offerings at responding institutions were most prevalent as part of a particular curriculum. Many institutions provided additional offerings for practical application. In addition to established

curriculums, most programs offered certain topics such as nutrition and genetics of horses in related animal science courses. Several innovative courses such as internships, apprenticeships, and preveterinary programs have been established at responding institutions. Less than half of the respondents were conducting research projects using horses.

Sponsoring horse shows and/or rodeos was engaged in more than any other extra curricular activity. Offering judging clinics for youth organizations such as 4-H and FFA ranked second followed by sponsoring judging, rodeo, and intercollegiate show teams respectively. Providing a summer youth program for secondary and/or elementary students and continuing education classes were given limited responses. Only a few programs provided a riding program for the handicapped. Major programs again exceeded minor programs in each of these categories except in offering judging clinics for youth organizations.

Respondents were asked to state their major program objectives. The objective to provide students with a fundamental background in horse management was ranked the most prevalent program objective. To provide training for students entering horse related careers and to enhance students personal enjoyment were identified by more than half of the responding institutions as being an objective of their program. To provide horse courses as a part of the animal science curriculum ranked high among the selections. To prepare students for a career in equine science and to prepare students to continue in advanced study toward a higher degree were selected less by the respondents than any other choices. Minor programs ranked the objective to provide students with a fundamental background in horse management as their prime objective

most often while major programs indicated that to provide training for students entering horse related careers was their top objective.

Equine program existence varied from one year to 53 years. A surge was evident six years ago as 14 programs originated. Equine courses were most often offered through animal science departments with equine, agriculture, physical education and recreation departments registering limited responses.

Enrollment of departments administering equine programs ranged from 20 to 3300 students with a mean enrollment of 324. The average number enrolled in lecture/lab courses was 38 and slightly less than 18 students in riding. Minor programs exceeded major programs in class size.

Curriculum and Related Factors. Most curriculums emphasized a combination of both management and equitation courses. Forty-five emphasized both areas, 35 management alone, and seven equitation. Curriculum of lecture/lab type courses included such offerings as horse production, horse breeding and management, and farrier science most prevalent. Hunt seat and stock seat were the two types of riding most often taught. Hunt seat was indicated by 43 respondents, stock seat by 34, and saddle seat by six. Other responses included the basic and balanced seat. Many respondents taught at least two levels within each type of riding. In offering riding classes, major programs exceeded minor programs in every category by almost a 2-1 margin.

Horse related industry was indicated by respondents as the main source of placement for graduates. Farm or ranch managers, instructors and trainers concluded the ranking as other sources. Trends of placement did not differ greatly between minor and major programs.

Breeds and Uses of Horses. Breeds of horses used for riding, breeding, and other purposes by responding programs were summarized as follows:

TABLE XXVI

BREEDS OF HORSES RANKED BY PROGRAM USE

Breed	Ranking by Use		
	Riding	Breeding	Other
American Saddle Bred	6	7	7
American Quarter Horse	1	1	1
Appaloosa	7	9	7
Arabian	5	4	6
Morgan	4	5	5
Tennessee Walking Horse	9	8	9
Thoroughbred	3	2	4
Grade	2	6	3
Other	8	3	2

The total number of horses used for riding equaled 2129 in 58 programs for an average of 36. Horses used for breeding totaled 1279 in 43 programs for an average of 29. Other uses included 763 horses in 34 programs for slightly over an average of 21. Seventy-two programs owned 2958 horses for a program average of approximately 41 horses.

Availability of Facilities. In reporting available facilities most programs had ample classroom space. Stabling, pasture and outdoor arena were prominent in about 70% of the responses. Breeding facilities, indoor arena and trails were available in about 45% of the programs. Other available facilities included hunt courses and race tracks.

Fifty-eight percent of the programs had facilities located on campus. Facilities located off campus averaged a distance of 7.1 miles.

Stabling for horses owned by students was available at 35 programs with an average monthly charge of $60.00 and full board averaging $144.00.

Half of the programs responding had immediate plans for expansion. Indoor arena and stabling were the two most needed facilities.

Program Funding. State funds were the major source of funding followed by private donations, student fees, and tuition. The same trend applied to both minor and major programs.

Additional fees for riding courses averaged $89.28 semester equivalency per student. Very few programs reported renting horses to students outside of regularly scheduled class periods.

Sixty-six percent of the programs owning horses were allowed to reinvest money from the sale of horses.

Donation of horses was the major type of program support from the horse industry. Cash donations, grants funding special projects, and scholarships followed.

Faculty and Staff Data. More of the faculty in responding programs were classified as instructors than all other faculty positions. Largest concentrations of instructors occurred in major programs. Faculty age in total programs ranged from a mean of 51 for professors to 29 years for instructors. In like manner, years of practical experience were reported at 29 for professors and 14 for instructors. Professors showed the highest average monthly salary of $1958, while instructors reported $1050. The largest percentage of faculty in total programs held doctorate degrees followed by bachelors and masters degrees.

Some programs responded as having from 0 to 10 positions (other than faculty) directly related with their horse programs. These positions were often filled by graduate assistants. In the past, the training ground for instructors in equine education has come from the animal sciences.

Attitudes Toward and Status of Programs. In comparing various factors, respondents ranked student interest in equine programs and overall need for programs very high. Need for expansion of programs also received high priorities. Internal support from administration and external support from area horse industry ranked low compared to support from students. Most respondents ranked job availability for graduates, need for a degree in horse science, and involvement of area horsemen in programs low. Horse research interest and priority for research funds concluded the rankings.

Conclusions

Horses are major revenue producers and occupy much of the leisure time of interested persons. They are important in our livestock industry and are increasing so.

In considering the total institutions offering equine education courses, over half offer 12 semester hours equivalency or more.

Student interest and participation in equine programs ranks high.

Institutional support for equine education programs ranks low.

Equine education programs receive limited financial support from external sources, especially the horse industry.

Colleges and universities rank at the top in demand for equine education followed by 4-H programs.

Colleges and universities are keeping pace by offering a greater number of equine education programs.

Institutions classified as major programs provide more academic offerings and extra curricular activities for students than minor programs.

The major objectives of equine programs are concerned with providing academic offerings instead of career preparation.

Institutions use horses more often for riding than any other purpose.

Most equine curriculums emphasize a combination of both management and equitation courses.

Most programs have basic facilities, but show need of major facilities.

The majority of equine education programs are concentrated in institutions with enrollment less than 5,000 and more than 20,000 students.

Recommendations

Program leadership should strive to improve relationship with institutional faculty and administration.

Additional sources of funding need to be explored by programs. External funds and support from the horse industry would help improve quality and relations of programs.

Institutions should strive for more involvement of the horse industry. Advisory committees should be established for assistance in operations of programs.

Institutions may increase enrollment by offering a quality program.

A communication network should be established for existing programs to increase coordination and communication.

A published directory should be made available by national organization to interested persons.

A further study should be conducted concerning curriculum, means of administering the curriculum, and job placement. A study determining the attitudes of students and their satisfaction with existing programs would also be in order.

BIBLIOGRAPHY

1. Ensminger, M. E. Horses and Horsemanship. Danville, Ill.: Interstate Printers and Publishers, Inc. 1969.

2. Parmenter, Carol Louise Wright. "Equine Education Programs and Related Studies as Found in Colleges and Universities in the United States." (Unpub. M.S. thesis, California State University, Northridge, 1978.)

3. Borton, A., C. D. Potter and J. W. Evans. "Survey of Horse Programs at Colleges and Universities." (A committee study, American Society of Animal Sciences, 1971.)

4. Rodgers, Tex. "Students, Horses, Education-Opportunity." Horseman Magazine (August, 1973), 76-81.

5. Rodgers, Tex. "Careers with Horses." Horseman Magazine (April, 1976), 4.

6. Lillibridge, Deborah and Glen. "My Life as a Trainer's Apprentice." Horseman Magazine (April, 1976), 48-52.

7. Potter, Gary D. "How to Prepare for a Horse Career Through College." Horseman Magazine (April, 1976), 48-52.

8. McElroy, Jack and Edward Brice. "Training for Occupations in the Horse Industry." Agricultural Education Magazine, Vol. 48, No. 5 (November, 1975), 112-113.

9. Kentucky Horse Council. "Kentucky Equine Survey 1977." Kentucky Horse Council: Lexington, Kentucky, April, 1978.

10. Best, John W. Research in Education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1959.

APPENDIX A

DATA COLLECTION INSTRUMENT AND

LETTERS OF TRANSMITTAL

SELECTED CHARACTERISTICS OF EQUINE SCIENCE PROGRAMS

AT THE POST SECONDARY LEVEL

DIRECTOR OF EQUINE PROGRAM _____

PHONE ( ) _____

INSTITUTIONAL, STATE AND AREA INFORMATION

1. What is the approximate full time enrollment of your institution? _____

2. Please rank 1-6 by economic importance in your state. _____ Beef _____ Dairy _____ Horses _____ Swine _____ Poultry _____ Sheep

3. What is the basic nature of the horse industry in your area? _____ Pleasure/Hobby _____ Showing _____ Breeding and Management _____ Racing _____ Other(please specify) _____

4. What is the greatest demand for an educational program in horse education in your state or area? _____ Post secondary level _____ 4-H program _____ On farm workers _____ Area vocational classes _____ Other (please specify) _____

OPERATIONAL TECHNIQUES AND EXTRA CURRICULAR ACTIVITIES

Please check your institution's types of involvement in equine education.
(Check as many as apply)

_____ Offering classes in horse science as a part of a particular curriculum? (Example: Credit is given toward requirements in animal science, physical education, recreation, etc.)

_____ Including the teaching of horse science in other related courses such as horse nutrition in animal nutrition?

_____ Providing the student the opportunity for practical application in conjunction with technical material taught?

_____ Providing opportunity for internships or apprenticeships with horses?

_____ Offering equitation as a part of horse science courses?

_____ Offering a preveterinary program?

_____ Conducting research using horses?

_____ Having a horse breeding program?

_____ Allowing students to sponsor horse shows and/or rodeos?

_____ Sponsoring a rodeo team?

_____ Sponsoring a horse judging team?

_____ Sponsoring a horse judging team?

_____ Sponsoring an intercollegiate show team?

_____ Offering a summer youth program for secondary and/or elementary students?

_____ Providing a riding program for the handicapped?

_____ Offering judging clinics for youth organizations such as 4-H and FFA?

_____ Other (please specify) _____

_____

_____

CURRICULUM

1. What is the objective(s) of your equine science offerings? (If more than one is applicable, rank in order of importance.)

   To prepare students for a career in equine science
   To provide training for students entering horse related career
   To provide students with a fundamental background in horse management
   To prepare students to continue in advanced study toward a higher degree
   To provide horse courses as a part of the animal science curriculum
   To enhance students' personal enjoyment
   Other (please specify) _____

2. How long has your program been in existence? _____ years

3. How many students make application for your horse program annually? _____ Number accepted? _____

4. Equine courses are offered through the department of: _____ animal science _____ recreation
   _____ physical education _____ Other (please specify) _____

5. How many students are enrolled in the department where horse education program is located? _____

6. Please rank by emphasis the type(s) of riding taught at your institution. _____ Riding is not taught
   _____ Stock seat _____ Hunt seat _____ Saddle seat _____ Other(please specify) _____

7. Does your curriculum emphasize: _____ management? _____ equitation? _____ both?

8. If you have a program that is designed to prepare people for careers, where are most of your graduates being placed who have concentrated their studies in horse science? _____ Farm or ranch manager _____ Trainer _____ Instructors
   _____ Horse related industry _____ Other (please specify) _____

9. What is average number enrolled in each lecture/lab class? _____ Riding class? _____

10. The academic calendar of your institution is: _____ Quarter or _____ Semester system.

11. What is the total number of credit hours offered in horse education? _____ hours

12. Please check courses offered and number of hours credit. If brochure or pages from catalog are available, please send instead of completing this question.

Management		Equitation	
Course	Hours credit	Course	Hours credit
_____ Horse Production	_____	_____ Beginning Stock Seat Equitation	_____
_____ Horse Breeding and Management	_____	_____ Int. Stock Seat Equitation	_____
_____ Farrier Science	_____	_____ Advanced Stock Seat Equitation	_____
Please list other horse science courses		_____ Beginning Hunt Seat Equitation	_____
_____	_____	_____ Int. Hunt Seat Equitation	_____
_____	_____	_____ Advanced Hunt Seat Equitation	_____
_____	_____	Please list other equitation courses	
		_____	_____
		_____	_____

BREEDS AND USES OF HORSES

1. Please account for all horses used in program.

Breeds	Number for Riding	Number in Breeding Herd	Number for Other Uses
American Saddle Bred			
American Quarter Horse			
Appaloosa			
Arabian			
Morgan			
Tennessee Walking Horse			
Thoroughbred			
Grade			
Other			
Total number of horses used			

2. How many of the above horses are owned by the institution? _____

3. Does your institution own a stallion of breeding age? _____ Yes _____ No If the answer is yes, do you stand him to outside mares? _____ Yes _____ No

FACILITIES

1. Please check facilities available for use in your program. _____ Classroom _____ Stabling _____ Outdoor arena _____ Indoor arena _____ Breeding facilities _____ Pasture _____ Trails _____ Other (please specify) _____

2. Are facilities located on campus? _____ Yes _____ No If answer is No, how far? _____ miles

3. Are facilities made available for students to stable privately owned horses? _____ Yes _____ No If the answer is Yes, what is the monthly cost for stall rent? $ _____ Full board $ _____

4. Do you have any immediate plans for expanding facilities? _____ Yes _____ No

5. What is currently the most needed facility for the horse program at your institution? _____

PROGRAM FUNDING

1. Rank in order the sources of funding by amounts furnished. _____ State funds _____ Private donations _____ Student fees _____ Tuition _____ Sale of horses _____ Other (please specify) _____

2. What is the additional cost per quarter or semester to the student for riding courses? $ _____

3. Does your institution rent horses to students other than during class periods? _____ Yes _____ No

4. Is the money from sale of horses reinvested in the horse program? _____ Yes _____ No _____ Do not own horses

5. Please indicate types of support your program receives from horse industry. _____ Scholarships _____ Cash donations _____ Donations of horses _____ Grants funding special projects _____ None _____ Other (please specify) _____

FACULTY

1. How many full time equivalent positions (other than faculty) are directly related with the horse program? _____

2. Are graduate assistants used to assist in teaching horse classes? _____ Yes _____ No

3. Please complete the following information only for the teaching faculty in the program.

Faculty position	Age	Number of years of practical experience	Highest educational degree obtained	Credit hours generated	Monthly salary range	Percent of time devoted to program

PHILOSOPHY

Following questions relate to level of support, interest, and need at your institution. From your viewpoint rate the following as they now exist.

	1=high	2	3	4	5=low	N/A 6
1. Departmental faculty support						
2. Administrative support						
3. Total institutional acceptability						
4. Need for program						
5. Horse research interest						
6. Priority for research funds						
7. Student interest in horse program						
8. Job availability in horse industry for graduates						
9. Involvement of area horsemen in operation of program						
10. Support from area horse industry						
11. Acceptability of horses in total animal science curricula						
12. Student interest for pleasure						
13. Student interest for career preparation						
14. Need for a degree in horse science						
15. Need for expansion of your program						

Name and title of person completing questionnaire. _____

Please fold and staple, making sure self-addressed stamped side is on the outside. Thank you for your time and effort in helping to complete this study. Feel free to make additional comments.

COMMENTS:

James A. Rudolph
Agriculture Education Department
Room 235 Agriculture Hall
Oklahoma State University
Stillwater, OK 74074

December 4th, 1978

Dear Colleague,

A study is being conducted for a doctoral dissertation in cooperation with the United States Department of Agriculture Extension and the American Horse Council to compile information on equine education programs in the United States. Results will be available upon request and a list with pertinent information will be comprised for interested persons, especially prospective students.

Be sure your institution is included by completing the enclosed questionnaire and returning it immediately. We hope to have data gathered by January 1st, 1979. The enclosed form is self-addressed and postage paid, so all you have to do is fold, staple, and drop it in the mail. Telephone inquirees should be made to James A. Rudolph at (405) 377-2000 Ext. 264 (Business) or (405) 372-4588 (Home).

Due to the limited amount of information concerning equine education programs, it is possible that this questionnaire was sent to the attention of the wrong department and/or individual. If this has occurred in your case, please forward to the correct person on your campus.

Thank you for taking the time from your schedule to complete this questionnaire. We are looking forward to receiving your response.

Cordially,

James A. Rudolph

James A. Rudolph

December 20th, 1978

Dear Colleague,

On December 5th you were mailed a questionnaire concerning equine education at the post secondary level. As of today, I have not received a response from your institution.

As I stated in the cover letter, we would like to have all responses in by January 1st, 1979. If you have not done so, would you please take a few minutes to complete the form and place it in the mail? Results of this study will be made available to many interested persons and we want your program included.

Thank you, and I am looking forward to receiving your response.

Cordially,

James A. Rudolph

James A. Rudolph

JR:rm

APPENDIX B

LISTING OF RESPONDENTS BY MINOR AND MAJOR PROGRAMS

LISTING OF "MINOR" PROGRAMS

1. Arkansas State University, State University, Arkansas
2. California State University, Fresno, California
3. University of California, Davis, California
4. Northeast Community College, Sterling, Colorado
5. University of Florida, Gainesville, Florida
6. Iowa State University, Ames, Iowa
7. Louisiana State University, Baton Rouge, Louisiana
8. Louisiana Tech University, Ruston, Louisiana
9. Southeastern Louisiana University, Hammond, Louisiana
10. University of Maine, Orono, Maine
11. University of Minnesota, St. Paul, Minnesota
12. Mississippi State University, Mississippi State, Mississippi
13. Stepehns College, Columbia, Missouri
14. University of Missouri, Columbia, Missouri
15. Montana State University, Bozeman, Montana
16. University of Nebraska, Lincoln, Nebraska
17. Rutgers University, New Brunswick, New Jersey
18. Cornell University, Ithaca, New York
19. Skidmore College, Saratoga Springs, New York
20. State University of New York, Binghamton, New York
21. State University of New York, Canton, New York
22. Davidson County Community College, Lexington, North Carolina

23. North Carolina State University, Raleigh, North Carolina
24. North Dakota State University, Fargo, North Dakota
25. Northwestern Oklahoma State University, Alva, Oklahoma
26. Oklahoma State University, Stillwater, Oklahoma
27. Oklahoma Panhandle State University, Goodwell, Oklahoma
28. Southeastern Oklahoma State University, Durant, Oklahoma
29. Pennsylvania State University, University Park, Pennsylvania
30. Clemson University, Clemson, South Carolina
31. South Dakota State University, Brookings, South Dakota
32. University of Tennessee, Knoxville, Tennessee
33. West Texas State University, Canyon, Texas
34. Utah State University, Logan, Utah
35. University of Vermont, Burlington, Vermont
36. Mary Baldwin College, Staunton, Virginia
37. Randolph-Macon College, Lynchburg, Virginia
38. Virginia Intermont College, Bristol, Virginia
39. Virginia Polytechnic Institute, Blackburg, Virginia
40. University of Wisconsin, Madison, Wisconsin

LISTING OF "MAJOR" PROGRAMS

1. Arizona State University, Tempe, Arizona
2. Scottsdale Community College, Scottsdale, Arizona
3. University of Arizona, Tucson, Arizona
4. Auburn University, Auburn, Alabama
5. California State Polytechnic University, Pomona, California
6. California Polytechnic State University, San Luis Obispo, California
7. Los Angeles Pierce College, Woodland Hills, California
8. Colorado State University, Fort Collins, Colorado
9. Lamar Community College, Lamar, Colorado
10. University of Connecticut, Storrs, Connecticut
11. University of Delaware, Newark, Delaware
12. University of Georgia, Athens, Georgia
13. College of Southern Idaho, Twin Falls, Idaho
14. Southern Illinois University, Carbondale, Illinois
15. McKendree College, Lebanon, Illinois
16. University of Illinois, Urbana, Illinois
17. Kirkwood Community College, Cedar Rapids, Iowa
18. Colby Community College, Colby, Kansas
19. Morehead State University, Morehead, Kentucky
20. Murray State University, Murray, Kentucky
21. University of Kentucky, Lexington, Kentucky
22. Northwestern State University, Natchitoches, Louisiana
23. University of Maryland, College Park, Maryland

24. University of Massachusetts, Amherst, Massachusetts
25. College of Saint Benedict, St. Joseph, Minnesota
26. University of Minnesota Technical College, Crookston, Minnesota
27. University of Minnesota Technical College, Waseca, Minnesota
28. Lindenwood College, St. Charles, Missouri
29. University of New Hampshire, Durham, New Hampshire
30. Centenary College, Hackettstown, New Jersey
31. State University of New York, Delhi, New York
32. State University of New York, Morrisville, New York
33. Findlay College, Findlay, Ohio
34. Lake Erie College, Painesville, Ohio
35. Miami University, Oxford, Ohio
36. Ohio State University, Columbus, Ohio
37. Claremeor Junior College, Claremore, Oklahoma
38. University of Rhode Island, Kingston, Rhode Island
39. Middle Tennessee State University, Murfreesboro, Tennessee
40. Tarleton State University, Stephenville, Texas
41. Texas A & M University, College Station, Texas
42. Texas Technical College, Lubbock, Texas
42. Averett College, Danville, Virginia
44. Lord Fairfax Community College, Middletown, Virginia
45. Washington State University, Pullman, Washington
46. University of Wisconsin, River Falls, Wisconsin
47. Northwest Community College, Powell, Wyoming
48. Sheridan College, Sheridan, Wyoming

VITA[2]

James Andy Rudolph

Candidate for the Degree of

Doctor of Education

Thesis: SELECTED CHARACTERISTICS OF EQUINE EDUCATION PROGRAMS AT COLLEGES AND UNIVERSITIES

Major Field: Agricultural Education

Biographical:

Personal Data: Born at Paducah, Kentucky, September 6, 1944, the son of Mr. and Mrs. William Andy Rudolph.

Education: Graduated from Reidland High School, Paducah, Kentucky in May, 1962; attended Paducah Junior College, Paducah, Kentucky, from September, 1962, to May, 1964; attended Murray State University, Murray, Kentucky, from September, 1964, to May, 1966; received Bachelor of Science in Agriculture from Murray State University in May, 1966; attended University of Kentucky, Lexington, Kentucky, from September, 1966, to December, 1966; attended Murray State University from June, 1967, to August, 1968, and from June, 1969, to August, 1969; received Master of Arts in Education from Murray State University in August, 1969; attended Murray State University from September, 1976, to August, 1977; completed requirements for the Doctor of Education degree at Oklahoma State University in May, 1979.

Professional Experience: Science teacher at Lone Oak High School, Paducah, Kentucky, from January, 1967, to April, 1968; teacher of Vocational Agriculture at Breckinridge County High School, Hardinsburg, Kentucky, from April, 1968, to August, 1973; instructor, Agriculture Department, Murray State University, Murray, Kentucky, from August, 1973, to August, 1977; EPDA Fellow, Oklahoma State University, from September, 1977, to August, 1978; curriculum writer, Oklahoma State Department of Vocational and Technical Education, Stillwater, Oklahoma, August, 1978, to January, 1979; Assistant Professor,

Agriculture Department, Murray State University, January, 1979, to present.

Professional Organizations: Member, American Vocational Association, Red Red Rose; former member, National Education Association, Kentucky Education Association, First District Education Association, Fourth District Education Association, Kentucky Vocational Agricultural Teachers' Association, National Vocational Agricultural Teachers' Association.