## REMARKS BEFORE THE HOUSE JUDICIARY COMMITTEE

ON HB 1277 - JULY 20, 1993

I AM ARTHUR GLATFELTER RESIDING IN YORK COUNTY.

I APPRECIATE THE OPPORTUNITY TO PRESENT MY THOUGHTS TO THIS COMMITTEE ON HB 1277 - KNOWN AS THE EQUINE LIABILITY BILL.

I AM HERE TO REPRESENT THE PENNSYLVANIA EQUINE COUNCIL OF WHICH I AM A CHARTER MEMBER AND ITS PURPOSE IS TO PROMOTE THE HORSE INDUSTRY IN THE COMMONWEALTH.

I AM PRESIDENT OF THE GLATFELTER INSURANCE GROUP WHICH WRITES BUSINESS IN 49 STATES AND CANADA.

I HAVE BEEN IN THE INSURANCE AGENCY BUSINESS FOR 45 YEARS.

MY WIFE AND I ALSO OWN AND OPERATE A HORSE BREEDING FARM
WHERE WE HAVE RAISED PASO FINO HORSES FOR THE PAST 18 YEARS.

PASO FINO HORSES ARE PLEASURE/SHOW HORSES. THEY, ALONG WITH THE MANY OTHER BREEDS OF HORSES TOTALLING MORE THAN 170,000 HERE IN PENNSYLVANIA, HAVE GIVEN THOUSANDS OF OUR FELLOW CITIZENS MUCH PLEASURE.

HORSES ARE ONE OF THE FEW ACTIVITIES THAT USUALLY INVOLVE THE FAMILY, NOT JUST ONE MEMBER OF A FAMILY, DOING HIS OR HER THING.

HORSES, AS YOU HAVE HEARD, ALSO CONTRIBUTE GREATLY TO OUR ECONOMY WITH EXPENDITURES REACHING NEARLY ONE-HALF BILLION DOLLARS ANNUALLY.

THE EXPENDITURES ON MY FARM ALONE IN 1992 FOR FEED, SUPPLIES OF ALL KINDS, EQUIPMENT, VETERINARIAN CARE, INSURANCE, ETC. WERE \$113,000 AND PAYROLL EXPENSES WERE \$110,000.

WE DO NOT BOARD HORSES AND WE DO NOT GIVE RIDING LESSONS OR RENT HORSES TO THE PUBLIC.

WE DO PUT PROSPECTIVE BUYERS ON OUR HORSES BUT UNDER STRICT SUPERVISION AND VERY CONTROLLED CONDITIONS, FOR IT IS QUITE COMMON FOR PEOPLE TO EXAGGERATE THEIR RIDING ABILITIES AND UNLESS WE HAVE KNOWLEDGE OF THEIR RIDING ABILITIES, WE WILL NOT ALLOW THEM TO TAKE A HORSE OUTSIDE OF OUR INDOOR ARENA.

ONE OF THE MOST SERIOUS DEVELOPMENTS IN OUR SOCIETY DURING THE PAST THREE DECADES IS THE BELIEF THAT ONE SHOULD NO LONGER HAVE TO BE RESPONSIBLE FOR THEIR OWN ACTIONS.

THAT EVEN IF ONE CHOOSES TO PARTICIPATE IN AN ACTIVITY THAT CLEARLY IS WROUGHT WITH THE DANGER OF INJURY OR DEATH, WHETHER IT BE FOOTBALL, SKIING, BUNGEE JUMPING OR HORSEBACK RIDING SOMEONE ELSE SHOULD BEAR THE RESPONSIBILITY IF THEY ARE INJURED OR KILLED.

ANY ADULT HUMAN BEING WHO VOLUNTARILY MOUNTS A HORSE CLEARLY KNOWS THERE IS AN INHERENT RISK OF INJURY OR DEATH BECAUSE ANIMALS OF ALL KINDS ARE UNPREDICTABLE.

NO OWNER OF A HORSE SHOULD BE HELD RESPONSIBLE FOR A RIDER WHO HAS PRESENTED THEMSELVES AS AN EXPERIENCED RIDER WHEN, IN FACT, THEY ARE NOT, OR FOR A HORSE WHO IS SPOOKED BY AN AUTOMOBILE, ANOTHER ANIMAL OR ANY OBJECT FOREIGN TO HIM.

ALL HORSES, NO MATTER HOW WELL TRAINED, REACT STRANGELY AT TIMES AND EXPERIENCED RIDERS USUALLY HANDLE THEM IN STRIDE.

IT IS WRONG TO HOLD THE OWNER OF A HORSE RESPONSIBLE FOR A HORSE'S ACTIONS UNLESS THERE IS CLEAR AND INDISPUTABLE EVIDENCE THAT THE OWNER OF THE HORSE COMMITTED AN ACT OF OMISSION THAT CONSTITUTES WILLFUL AND WANTON DISREGARD FOR

THE SAFETY OF A PARTICIPANT AND THAT ACT OF OMISSION CAUSED THE INJURY.

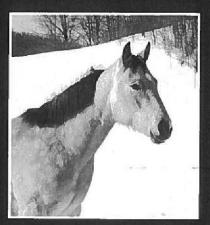
IF HB 1277 IS NOT PASSED, THE HORSE INDUSTRY IN PENNSYLVANIA WILL BE REDUCED TO A FEW BREEDING FARMS SUCH AS MY OWN.

LIABILITY INSURANCE FOR RIDING INSTRUCTION FACILITIES IS NOT ONLY VERY DIFFICULT TO FIND BUT IT IS ALSO VERY EXPENSIVE IF IT CAN BE FOUND. FOR EXAMPLE: THE COST BEING QUOTED TODAY IS IN THE AREA OF \$13.00 FOR EACH \$100 OF GROSS RECEIPTS.

HACKING OR RENTAL FACILITIES ARE EVEN MORE DIFFICULT TO INSURE AND WHEN SUCCESSFUL, THE COST WILL BE ABOUT \$2500 PER HORSE FOR A \$500,000 LIMIT OF LIABILITY. OBVIOUSLY, HACKING STABLES CANNOT CHARGE A RATE PER HOUR SUFFICIENT TO COVER EXPENSES AND ATTRACT ENOUGH CUSTOMERS TO REMAIN IN BUSINESS.

I URGE YOU TO SUPPORT THIS LEGISLATION SO THAT THE MANY THOUSANDS OF OUR YOUTH AND ADULTS CAN CONTINUE TO ENJOY THE WONDERFUL RELATIONSHIP BETWEEN HORSE AND MAN THAT IS AS OLD AS THIS NATION AND BECAUSE WE CANNOT AFFORD TO LOSE ANY MORE BUSINESSES THAT PROVIDE JOBS AND REVENUE IN THIS COMMONWEALTH.

THANK YOU.











Pennsylvania Equine Industry Profile

# THE PENNSYLVANIA STATE UNIVERSITY DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY







Cathy A. Hamlett Assistant Professor of Agricultural Economics

Research Directed by:

Kelly Smith-Wells Research Technologist Health and Human Development

Data Collection and Analysis by the Pennsylvania Agricultural Statistics Service:

W.C. Evans, State Statistician
P. Gregory Trucker, Deputy State
Statistician
Michael D. Miller, Agricultural
Statistician

# PENNSYLVANIA EQUINE INDUSTRY PROFILE

Funded By
The Pennsylvania
Department Of
Agriculture

This Report
is Dedicated to
the Memory of
James P. Gallagher



## **Table of Contents**

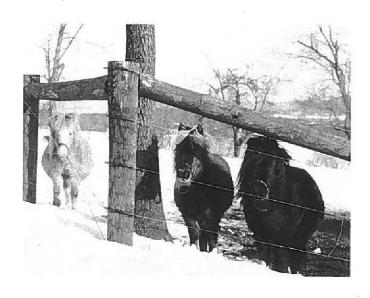
ACKNOWLEDGEMENTS	
INTRODUCTION	2
INTRODUCTION	
EQUINE SURVEY PROCEDURES	2
List Development	
Questionnaire Design	
List Sample	
Area Sample	
Data Analysis and Summary	
Data Analysis and Summary	
EQUINE SURVEY RESULTS	2
Inventory by Breed and District	
Average and Total Value by Breed	C
Primary Use by Breed	······
Equine Operations by Type	ر
Equine-Related Acreage, Primary Use, and Prior Use.	·-····································
Value of Equine-Related Assets	
Equine-Related Expenditures	ر
Hay Purchases	
Equine-Related Employment	
Total Equine, Average Value, and Total Expenditures by County	11
Equine-Related Income and Gross Income	11
Time Spent on Equine Recreation and Equine Activities	12
General Information on Equine Owners	
ECONOMIC AND SOCIAL IMPACTS	14
Rural-Urban Linkages	
Horse Racing in Pennsylvania	
The Amish	
The Horse as a Therapeutic and Educational Tool	
APPENDIX I: SOURCE FOR HORSEOWNER NAMES, ADVISORY	
COMMITTEE, AND MAP FOR DISTRICTS	19
,	
APPENDIXA QUESTIONNAIRE	23

## **List of Figures**

1:	EQUINE BY PRINCIPAL BREED AND TYPE	4
2:	AVERAGE VALUE PER HEAD BY BREED	4
3:	TOTAL VALUE BY BREED	5
4:	EQUINE COMMERCIAL OPERATIONS	7
5:	RANGE OF GROSS INCOME RECEIVED FROM ALL ACTIVITIES	12
6:	AMOUNT OF TIME SPENT WEEKLY ON EQUINE-RELATED	
	ACTIVITIES	13
7:	AVERAGE AGE OF EQUINE OWNERS IN PENNSYLVANIA	13
8:	1990 PENNSYLVANIA HORSE INDUSTRY SURVEY FLOW OF	
	DOLLARS	15

## **List of Tables**

1: NUMBER OF EQUINE BY BREED BY DISTRICT, JUNE 1, 1990	4
<ul> <li>NUMBER OF EQUINE, AVERAGE VALUE AND TOTAL VALUE BY BREED, JUNE 1, 1990</li></ul>	
<ul> <li>NUMBER OF EQUINE BY PRIMARY ACTIVITY, BY DISTRICT, JUNE 1, 1990</li></ul>	, 19905
<ul> <li>NUMBER OF EQUINE BY PRIMARY ACTIVITY, BY BREED, JUNE 1, 1990</li></ul>	6
<ul> <li>NUMBER OF EQUINE OPERATIONS BY OPERATING ARRANGEMENT, JUNE 1, 1990</li> <li>NUMBER OF COMMERCIAL OPERATIONS BY TYPE OF OPERATION, JUNE 1, 1990</li> <li>NUMBER OF EQUINE OPERATIONS BY EQUINE HOUSING LOCATION, JUNE 1, 199</li> <li>NUMBER OF OPERATIONS, EQUINE-RELATED ACREAGE, &amp; AVERAGE EQUINE ACREAGE PER OPERATION, BY DISTRICT, JUNE 1, 1990</li></ul>	6
<ul> <li>NUMBER OF COMMERCIAL OPERATIONS BY TYPE OF OPERATION, JUNE 1, 1990</li> <li>NUMBER OF EQUINE OPERATIONS BY EQUINE HOUSING LOCATION, JUNE 1, 19</li> <li>NUMBER OF OPERATIONS, EQUINE-RELATED ACREAGE, &amp; AVERAGE EQUINE ACREAGE PER OPERATION, BY DISTRICT, JUNE 1, 1990</li></ul>	07
<ul> <li>NUMBER OF EQUINE OPERATIONS BY EQUINE HOUSING LOCATION, JUNE 1, 19</li> <li>NUMBER OF OPERATIONS, EQUINE-RELATED ACREAGE, &amp; AVERAGE EQUINE         ACREAGE PER OPERATION, BY DISTRICT, JUNE 1, 1990</li></ul>	)7
9: NUMBER OF OPERATIONS, EQUINE-RELATED ACREAGE, & AVERAGE EQUINE ACREAGE PER OPERATION, BY DISTRICT, JUNE 1, 1990	907
ACREAGE PER OPERATION, BY DISTRICT, JUNE 1, 1990	
10: TOTAL ACRES OPERATED & EQUINE-RELATED ACREAGE, BY PRIMARY USE,  JUNE 1, 1990	8
JUNE 1, 1990	
11: PRIOR USE OF EQUINE-RELATED ACREAGE, & ACREAGE BY PRIOR USE, JUNE 1 12: ACREAGE & VALUE OF EQUINE-RELATED LAND, FENCING, & FACILITIES 13: VALUE OF EQUINE-RELATED EQUIPMENT & SUPPLIES, JUNE 1, 1990 14: EQUINE EXPENDITURES MADE INSIDE & OUTSIDE PENNSYLVANIA, AND AVER	8
12: ACREAGE & VALUE OF EQUINE-RELATED LAND, FENCING, & FACILITIES 13: VALUE OF EQUINE-RELATED EQUIPMENT & SUPPLIES, JUNE 1, 1990	, 19908
13: VALUE OF EQUINE-RELATED EQUIPMENT & SUPPLIES, JUNE 1, 1990	8
14: EOUINE EXPENDITURES MADE INSIDE & OUTSIDE PENNSYLVANIA, AND AVER	8
PER FOUNE 1990	AGE
I DIC DOOM ID, 1990 minimum	8
15. TONS OF HAY PURCHASED FOR EQUINE IN CALENDAR YEAR 1990	9
16: TONS OF HAY PURCHASED FOR EQUINE AND AVERAGE PER EQUINE	9
17: FOUNE-RELATED LABOR, JUNE 1, 1990	9
18. TOTAL FOLLINE, AVERAGE VALUE, & TOTAL EXPENDITURES BY COUNTY, 1990	10
19 NUMBER OF FOUNE, TOTAL VALUE, AND TOTAL EQUINE-RELATED EXPENDING	TURES,
BY COMMERCIAL AND NON-COMMERCIAL OPERATIONS, 1990	12
20. DOLLAR RANGE OF GROSS INCOME RECEIVED FROM ALL ACTIVITIES, 1990	12
21: PERCENT OF GROSS INCOME RECEIVED FROM EQUINE-RELATED ACTIVITIES,	199012
22: PERCENT OF EQUINE-RELATED INCOME RECEIVED FROM PENNSYLVANIA SOU	JRCES,
1990	12
23. IMPORTANCE OF EOUINE-RELATED ACTIVITIES TO THE EQUINE OWNER'S	
OVERALL RECREATION, 1990	12
24: AVERAGE HOURS SPENT WEEKLY ON EQUINE-RELATED RECREATION, 1990	13
25: AVERAGE HOURS SPENT WEEKLY ON EQUINE-RELATED ACTIVITIES, 1990	13
26: EDUCATIONAL BACKGROUND OF EQUINE OWNERS, JUNE 1, 1990	13
27: AGE OF EQUINE OWNERS, JUNE 1, 1990	
28: YEARS EQUINE OWNERS HAVE LIVED IN PRESENT COMMUNITY, JUNE 1, 1990.	12
29: NUMBER OF YEARS EQUINE OWNERS HAVE BEEN INVOLVED IN EQUINE-RELA	ATED
ACTIVITIES, JUNE 1, 1990	14
30: IMPORTANCE OF EQUINE-RELATED ACTIVITIES TO THE PREVIOUS GENERATION	UN,
IIINF 1 1990	.,14
31: NUMBER OF YEARS EQUINE HAVE BEEN AT PRESENT LOCATION, JUNE 1, 1990	14
TOTAL TIME 1 1000	• ,

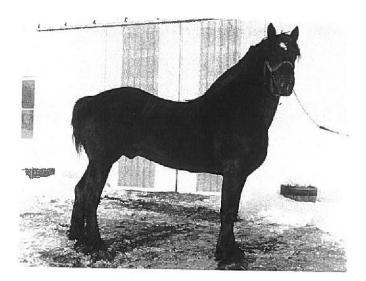


## Acknowledgements

Two individuals deserve special recognition for their contributions to the success of this project. James P. Gallagher began the process of studying equine as a separate sector of the Pennsylvania agricultural economy. He did the first study in 1967 and again began the process in 1988, which eventually resulted in this report. Jim was able to gather together the resources needed and convince individuals in the equine industry to cooperate. Unfortunately, he did not live to see the completion of the project. Without his dedication, this study would not have been initiated or completed. The equine industry, the state of Pennsylvania, and the authors owe him debts of gratitude which we will never have a chance to repay.

Neil B. Gingrich also made a significant contribution to this project. As a co-principal investigator, prior to his retirement in late 1991, he provided invaluable assistance and advice relative to the list development and questionnaire design. Even from retirement he has been willing to assist with data analysis. Many thanks Neil.

Many of the photographs in the following pages were taken by Mike Philippe. Edward Keys of The United States Trotting Association provided photographs for our use as did Steven F. Williams, visuals/photo specialist at The Pennsylvania State University. We also obtained a photograph from the Director of Publications, Frederick Lipkin, at Penn National Race Course. Thank you all for your photographic contributions.



#### Introduction

The equine industry of Pennsylvania continues to thrive (a doubling in numbers since 1967). The 170,000 horses, ponies, donkeys, and mules provide opportunities for residents of Pennsylvania to enjoy high-quality recreation. Opportunities for recreation include riding trails, 4-H programs, therapeutic riding for the handicapped, local shows and competitions, and countless other recreational outlets such as the successful racing industry. Many residents are regular spectators at race tracks. Still other residents make all or part of their income from the equine industry. These include breeders, trainers, veterinarians, managers, and many others. Pennsylvania residents also enjoy equine at shows and equestrian competitions.

Open space and aesthetic benefits are associated with horses and horse farms. In a state with many areas of rapid urbanization, maintaining open space through private activities is vital. Horses are generally close to the people who own or enjoy them, which means that urbanization tends to bring more equine, and these equine help the area cling to open fields and aesthetically appealing settings. The following pages report the result of an intensive study of the equine industry in Pennsylvania. The information that was gathered further details the importance of the horse, pony, donkey, or mule to residents of Pennsylvania. The economic impact of the industry is also detailed, which further highlights the equine's importance to the overall economy. Readers should note that the following information is only a snapshot of a very dynamic and growing industry. For a complete understanding of the equine sector, data should be collected at regular intervals over time.

#### **Equine Survey Procedures**

The 1990 Pennsylvania Equine Survey was conducted in four stages: 1) compilation of a list of equine owners; 2) questionnaire design and testing; 3) data collection; and 4) data summary and analysis.

#### List Development

A comprehensive list of equine owners did not exist prior to the survey. Such a list was compiled by contacting individuals representing equine-related organizations; these included breed associations, riding clubs, and county 4-H horse programs. Assistance was also provided by national breed associations and the Pennsylvania Equine Council. A list of sources is included in Appendix I. The equine-owner names obtained from the various sources were combined with lists already existing at the Pennsylvania Department of Agriculture.

Inherent in building any list of names is the difficulty of duplication, particularly when names are obtained from several different sources. To help eliminate duplication, the final list of equine owners was computerized and a list resolution process was used. In this procedure, duplicate names were detected by matching items such as name, address, or phone number. After duplicate names were eliminated, approximately 27,500 names of equine owners remained.

#### Questionnaire Design

The questionnaire used in the mail survey was developed through a multi-step process. An initial draft was constructed by using example questionnaires from earlier equine surveys conducted in Michigan, Tennessee, New York, and New Jersey. An advisory council of key individuals 1 in the state's equine industry provided input on additional questions to include, wording of questions, and flow of the questionnaire. Appendix II includes a copy of the final questionnaire. A pretest was then conducted by mailing a questionnaire and cover letter to fifteen individuals chosen to be representative of equine owner types in the overall population. Further revisions to the questionnaire were made following the results of the pretest. The final content and design of the questionnaire was determined jointly by representatives from the Pennsylvania Agricultural Statistics Service and The Pennsylvania State University.

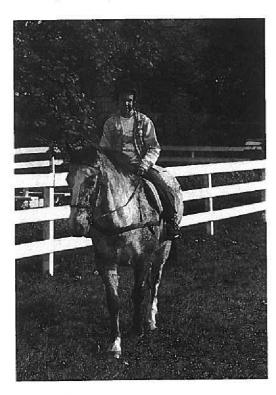
<sup>&</sup>lt;sup>1</sup>Names of these individuals are in Appendix I.

#### List Sample

Questionnaires were mailed in early February 1991 to every name on the equine population list. Limited equine data on 3,100 of the equine owners had already been gathered by the Agricultural Statistics Service in previous surveys and was used in selecting individuals for non-response follow-up.

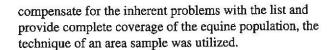
In late April, a sample of 700 names was selected from the non-response list of equine owners. Five hundred of the names came from the list of 3,100 names for which prior information existed. The additional 200 names were randomly selected from the remaining list of non-responding equine owners. Follow-up procedures included each non-responding name being assigned to a trained field interviewer or enumerator. The enumerators then attempted to personally interview each equine owner for the appropriate data.

An additional follow-up was conducted in early November. A simple random sample of 250 non-responding names was drawn. Again, field enumerators contacted all 250 equine owners to complete the questionnaire information.



#### Area Sample

A major problem with sampling from a list of names as was done with this survey is that it is a list of equine owners at one point in time. Over time individuals sell their equine or acquire equine for the first time. Addresses also change. A 100 percent accurate list is impossible to maintain. To



A statewide geographic sample was chosen that was comprised of 330 segments of land. The segments ranged in size from 51 to 850 acres. Trained enumerators then canvassed each segment for equine owners in May and June of 1990. Of the 330 segments, 143 were identified as containing individuals who presently owned equine or who intended to own a horse within the next twelve months.

Field enumerators then went back to the 143 segments in March of 1991 with questionnaires. The individuals who completed questionnaires as part of the area sample were checked for duplication with the list and excluded from the list expansions.

#### **Data Analysis and Summary**

A total of 7,606 questionnaires were tabulated with 7,335 coming from the list sample. The remaining 271 were obtained through the area sample. Of this total, 5,351 respondents presently owned equine (5,103 from the list sample and 248 from the area sample). The data from these questionnaires were expanded to represent all equine owners in either the mail or area samples. The data in the following section reflect the expanded data.

#### Equine Survey Results<sup>2</sup>

#### **Inventory by Breed and District**

The equine population in Pennsylvania contains many breeds of horses. Number of equine by breed are reported in Table 1 for the nine geographic districts of Pennsylvania, a map of which is included in Appendix I. Of the 170,000 horses reported as of June 1990 in Pennsylvania, nearly 28,000 are Quarter Horses and just over 18,000 are Standardbreds. Figure 1 also indicates that the most numerous breed is the Quarter Horse by a significant margin.

As was expected, the southeast region of Pennsylvania had by far the most equine. Nearly 30 percent of all the horses in Pennsylvania are in this area. The next leading region was the southwest region with 14 percent of the equine. Understandably, the two largest metropolitan areas

<sup>&</sup>lt;sup>2</sup>The survey was designed to provide statistically reliable estimates at the state level. District and county level estimates are based on fewer reports and should be viewed as less accurate than state totals. Coefficients of variation (measures of variability) were 5.7 percent for the state level equine inventory and 7.3 percent for total state level equine-related expenditures.

TABLE 1: NUMBER OF EQUINE BY BREED BY DISTRICT, JUNE 1, 1990

District	Appaloosa	Arabian	Half Arabian	Crossbred/ Unknown	Donkeys	Draft
Northwestern	1,600	800	250	650	150	1,800
North Central	1,050	750	500	700	1/	1,050
Northeastern	550	400	150	550	1/	250
West Central	1,600	1,250	550	600	100	1,750
Central	1,600	1,100	500	1,150	100	2,900
East Central	1,300	450	300	1,450	100	350
Southwestern	2,350	1,400	500	2,000	150	2,350
South Central	1,550	1,200	500	2,150	250	750
Southeastern	2,100	1,650	850	2,750	250	6,200
TOTAL	13,700	9,000	4,100	12,000	1,100	17,400

District	Morgan	Mules	Paint	Palomino	Ponies	Quarter Horses
Northwestern	1,750	150	350	100	2,000	2,500
North Central	350	600	400	250	1,000	2,000
Northeastern	150	1/	150	150	550	1,150
West Central	500	250	200	300	2,100	3,650
Central	750	1,400	400	250	2,300	3,500
East Central	300	150	200	200	1,350	2,150
Southwestern	750	350	300	150	1,900	4,100
South Central	500	550	600	200	1,850	3,950
Southeastern	1,250	6,350	300	400	4,050	4,700
TOTAL	6,300	9,800	2,900	2,000	17,100	27,700

District	American Saddlebred	Standard- bred	Tennessee Walker	Thorough- bred	Warm- bloods	All Other	Total
Northwestern	500	550	1/	300	V	350	13,800
North Central	250	200	150	150	1/	400	9,800
Northeastern	1/	400	1/	350	1/	200	5,000
West Central	500	1,300	450	500	100	400	16,100
Central	350	1,200	450	850	100	400	19,300
East Central	350	650	500	650	150	200	10,800
Southwestern	1,600	4,050	600	850	150	350	23,900
South Central	350	4,900	750	1,900	100	450	22,500
Southeastern	3,400	4,950	700	7,350	700	850	48,800
TOTAL	7,300	18,200	3,600	12,900	1,300	3,600 1	170,000

<sup>1/</sup> Less than 100, included in other districts.

(Philadelphia and Pittsburgh) are in the regions that contain nearly one-half of the horses.

Table 2 separates the 17,400 draft horses by the two major breeds. The Belgians are most numerous with 68 percent of the numbers, followed by Percherons with 17 percent.

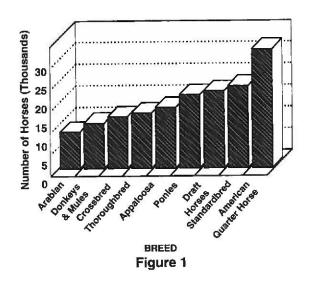
TABLE 2: NUMBER OF DRAFT HORSES BY BREED, JUNE 1, 1990

Breed	Number	Percent
Belgian	11,800	68
Percheron	3,000	17
Other and Unknown	2,600	15
TOTAL	17,400	100

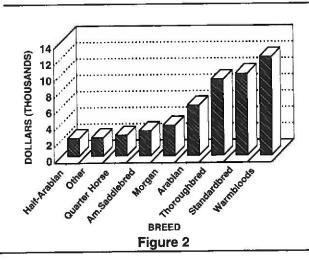
#### Average and Total Value by Breed

The equine in Pennsylvania represent a valuable state asset, which is reflected in Table 3. The total value of the 170,000 horses in Pennsylvania is \$620 million with the average value per head ranging from over \$12,000 for the Warmbloods to a little under \$500 for the 1,100 donkeys. Figure 2 highlights the relative differences in average value

#### **EQUINE BY PRINCIPAL BREED AND TYPE**



#### **AVERAGE VALUE PER HEAD BY BREED**



by breed. As was expected, the two major racing breeds (standardbreds and thoroughbreds) had relatively high values per horse with dollar values of \$10,100 and \$9,400 respectively. These two breeds are also worth the most total money as is reflected in Figure 3.

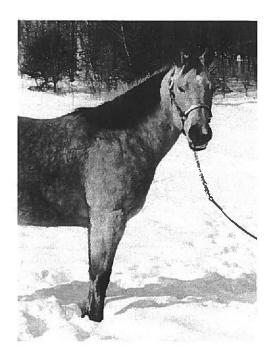


TABLE 3: NUMBER OF EQUINE, AVERAGE VALUE AND TOTAL VALUE BY BREED, JUNE 1, 1990

Breed	Number	Value Per Head	Total Value
		Dollars	(000 Dollars)
Light Horse Breeds			
Arabian	9,000	6,200	55,800
Half Arabian	4,100	2,170	8,897
American Saddlebred	7,300	3,100	22,630
Appaloosa	13,700	1,810	24,797
Morgan	6,300	3,750	23,624
Paint	2,900	2,650	7,685
Palomino	2,000	1,810	3,620
Quarter Horse	27,700	2,550	70,635
Tennessee Walker	3,600	2,030	7,308
Warmbloods	1,300	12,140	15,782
Crossbred or Unknown	12,000	1,030	12,360
Other	3,600	2,260	8,136
Race Horse Breeds			
Standardbred	18,200	10,100	183,820
Thoroughbred	12,900	9,400	121,260
Draft Horses	17,400	1,700	29,580
Ponies	17,100	720	12,312
Mules	9,800	1,150	11,270
Donkeys	1,100	440	484
TOTAL	170,000	3,647	620,000

#### Primary Use by Breed

Table 4 highlights the various uses of the equine in Pennsylvania. Racing horses are most numerous in the southeastern region followed by the southwestern and south central. The leading use or activity following the "other" in the southeastern category is the pleasure or sport category with the southeastern region again having the greatest



number with 15,500 horses. The "other" category included horses used for field or farm work and as carriage horses. These were predominantly horses owned by the Amish (see further description in a later section). Retired horses and horses used for instructional purposes are also included in the "other" category. The same activity categories are reported by breed in Table 5. Of the light horse breeds, the numerous Quarter Horses are used mostly for pleasure or sport. Pennsylvania had a total of 20,400 breeding mares and 4,000 breeding stallions in 1990. Nearly 7,000 mares and 600 stallions were used for breeding in the two racing breeds. In addition, another 8,500 racing horses were in active competition.

#### **TOTAL VALUE BY BREED**

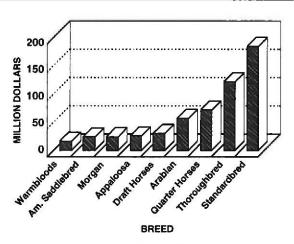


Figure 3

TABLE 4: NUMBER OF EQUINE BY PRIMARY ACTIVITY, BY DISTRICT, JUNE 1, 1990

	<u></u>	Pleasure	Other	Bree	ding	Foals of	Other Activity	Total
District	Racing	or Sport	Competition	Mares	Stallions	1990	2 tollvity	
Northwestern	200	5,900	1,700	1,800	550	600	3,050	13,800
North Central	1/	5,150	800	1,150	300	450	1,950	9,800
Northeastern	250	2,750	450	500	100	150	800	5,000
West Central	600	7,750	1,900	1,950	450	650	2,800	16,100
Central	450	9,150	1,600	2,000	450	650	5,000	19,300
East Central	600	6,250	850	900	200	350	1,650	10,800
Southwestern	2,050	9,900	2,300	3,650	650	1,400	3,950	23,900
South Central	1,050	8,750	1,900	3,450	550	1,500	5,300	22,500
Southeastern	3,300	15,500	3,100	5,000	750	2,250	18,900	48,800
TOTAL	8,500	71,100	14,600	20,400	4,000	8,000	43,400	170,000

<sup>1/</sup> Less than 100, included in other districts.

TABLE 5: NUMBER OF EQUINE BY PRIMARY ACTIVITY, BY BREED, JUNE 1, 1990

District	Racing	Pleasure or Sport	Other Competition	Bree	eding	Foals of	Other Activity	Total
	Racing	Of Sport	Composition	Mares	Stallions	1990		
Light Horse Bre	eds							
Arabian	_	3,900	1,250	1,950	600	450	850	9,000
Half Arabian	_	3,150	400	150	<u>1</u> /	1/	400	4,100
American								
Saddlebred		2,750	650	450	150	150	3,150	7,300
Appaloosa	_	8,650	1,200	1,700	450	550	1,150	13,700
Morgan	_	2,750	850	1,250	400	300	750	6,300
Paint	ş <del></del>	1,550	500	400	150	200	100	2,900
Palomino		1,500	200	150	<u>1</u> /	1/	150	2,000
Ouarter Horse		15,850	4,400	3,400	700	1,150	2,200	27,700
Tennessee Walke	er —	2,450	350	400	100	150	150	3,600
Warmbloods		350	500	200	1/	100	150	1,300
Crossbred or								
Unknown		7,200	550	350	1/	200	3,700	12,000
Other	-	1,900	200	400	100	150	850	3,600
Race Horse Bre	eds							12
Standardbred	4,500	2,050	100	4,200	300	2,200	4,850	18,200
Thoroughbred	4,000	2,800	1,450	2,550	300	1,050	750	12,900
Draft Horses		1,150	500	1,900	350	850	12,650	17,400
Ponies		11,400	1,500	850	300	500	2,550	17,100
Mules	-	1,200	1/			1/	8,600	9,800
Donkeys	_	500		100	100	<u>1</u> /	400	1,100
TOTAL	8,500	71,100	14,600	20,400	4,000	8,000	43,400	170,000

<sup>1/</sup> Less than 100, included in other breeds.



#### **Equine Operations by Type**

A total of 44,000 individuals, partnerships, or others owned equine in Pennsylvania in 1990. As Table 6 indicates, individual decision-making was the predominant operating arrangement with 89 percent. There were, however, 1,100 hired managers who had the decision-making responsibility for the equine operation.

TABLE 6: NUMBER OF EQUINE OPERATIONS BY OPERATING ARRANGEMENT, JUNE 1, 1990 1/

Operating Arrangement	Number	Percent
Individual	39,100	89
Partnership	3,800	9
Hired Manager	1,100	2
Other	_	2/
TOTAL	44,000	100

I/ Includes owners whose equine were located at a Pennsylvania boarding stable, other arrangement, or out-of-state on June 1, 1990.

#### **EQUINE COMMERCIAL OPERATIONS**

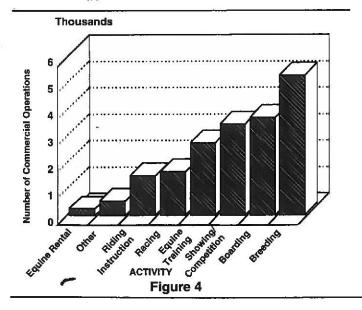


TABLE 7: NUMBER OF COMMERCIAL OPERATIONS BY TYPE OF OPERATION, JUNE 1, 1990 1/

Type of Operation	Number 2/	Percent
Boarding	3,700	42
Breeding	5,300	60
Equine Training	2,750	31
Riding Instruction	1,500	17
Racing	1,650	19
Showing/Competition.	3,450	39
Equine Rental	250	3
Other	550	6
TOTAL	8,800	

<sup>1/</sup> Commercial refers to an activity pursued for the purpose of deriving immediate or future income.

Equine owners were broken into two categories. A commercial operation refers to equine owners who pursue equine activities for the purpose of deriving immediate or future income. All other owners are considered noncommercial. Table 7 indicates the involvement of commercial operations in eight activities. These subcategories are further developed in Figure 4. Over 5,000 or 60 percent of the commercial operations consider themselves breeding operations. Boarding horses is a commercial activity on nearly 4,000 horse operations. This is followed closely by showing or competition activities.

Equine owners can also be described according to where their equine are housed. Equine operations by equine housing location are reported in Table 8. Eighty-five percent of the 44,000 equine operations housed their equine on land in Pennsylvania that is owned, rented, or leased by the horse owner. Just over 6,000 owners have their equine in a boarding stable or other arrangement. Four hundred owners had their equine housed out-of-state.

#### Equine-Related Acreage, Primary Use, and Prior Use

The 37,300 equine owners or operations (excludes owners whose equine were located at a boarding stable, in another arrangement category, or out-of-state) had a total of 520,000 acres associated with their equine (Table 9). Equine were associated with 114,000 acres in the southeast district where

TABLE 8: NUMBER OF EQUINE OPERATIONS BY EQUINE HOUSING LOCATION, JUNE 1, 1990

Equine Housing Location	Number	Percent
Owned, Rented or Leased		·· <del>·</del>
Pennsylvania Land	37,300	85
Boarding Stable or Other		
Arrangement in Pennsylvania	6,300	14
Boarding Stable or Other		
Arrangement Out-of-State	400	1
TOTAL	44,000	100

<sup>2/</sup> Less than 1 percent.

<sup>2/</sup> Number will not add to total since an operation may be classified as more than one type.

TABLE 9: NUMBER OF OPERATIONS, EQUINE-RELATED ACREAGE, & AVERAGE EQUINE ACREAGE PER OPERATION, BY DISTRICT, JUNE 1, 1990

District	Number of Operations 1/	Equine-Related Acres	Average Equine Acres Per Operation
Northwest	3,000	42,000	14.0
North Central	2,600	52,000	20.0
Northeast	1,100	26,000	23.6
West Central	4,100	68,000	16.6
Central	4,800	46,000	9.6
East Central	2,200	26,000	11.8
Southwest	4,500	78,000	17.3
South Central	4,100	68,000	16.6
Southeast	10,900	114,000	10.5
TOTAL	37,300	520,000	13.9

<sup>1/</sup> Excludes owners whose equine were located at a Pennsylvania boarding stable or other arrangement or out-of-state on June 1, 1990.

TABLE 10: TOTAL ACRES OPERATED & EQUINE-RELATED ACREAGE, BY PRIMARY USE, JUNE 1, 1990

Use	Total Acres Operated	Percent	Acres Used For Equine	Percent
Cropland	1,380,000	49	140,000	27
Pasture	690,000	24	300,000	58
Other	780,000	27	80,000	15
TOTAL	2,850,000	100	520,000	100

there were nearly 11,000 operations. The average acres per operation across the nine districts in Pennsylvania varied from 9.6 acres in the central district to 23.6 acres in the northeast.

TABLE 11: PRIOR USE OF EQUINE-RELATED ACREAGE, & ACREAGE BY PRIOR USE, JUNE 1, 1990

Prior Use	Total Acres	Percent
Crop Farm	174,000	34
Livestock Farm		
(excluding equine)	209,000	40
Equine Farm	37,000	7
Non-Agricultural	77,000	15
Unknown	17,000	3
Other	6,000	1
TOTAL	520,000	100

## TABLE 12: ACREAGE & VALUE OF EQUINE-RELATED LAND, FENCING, & FACILITIES

Total Acres Operated	2,850,000
Total Equine-Related Acres	520,000
Total Value of Equine-Related Land,	2002.2000 · 4000.000
Fencing, and Facilities	\$ 2,930,000,000
Average Value Per Acre	\$ 5,635

## TABLE 13: VALUE OF EQUINE-RELATED EQUIPMENT & SUPPLIES, JUNE 1, 1990

Total Value	\$ 370,000,000
Average Value Per Operation	\$ 8,409
Average Value Per Equine	\$ 2,176

The 520,000 acres of equine-related acreage were associated with 2.85 million total acres operated by the equine owners (Table 10). The total acres operated by equine owners was nearly one-half in cropland and one-fourth in pasture. Equine-related acres were used predominantly as pasture for the equine.

## TABLE 14: EQUINE EXPENDITURES MADE INSIDE & OUTSIDE PENNSYLVANIA, AND AVERAGE PER EQUINE, 1990

Expense Category	Inside Pennsylvania	Outside Pennsylvania	Total Expenditures	Average Per Equine
	(000) Dollars	(000) Dollars	(000) Dollars	Dollars
Feed	76,560	2,450	79,010	465
Bedding	13,720	470	14,190	83
Grooming Supplies	5,180	530	5,710	34
Tack	14,110	1,670	15,780	93
Equipment	61,320	6,940	68,260	402
Boarding of Equine	16,120	3,160	19.280	113
Purchases of Equine	34,640	16,270	50,910	299
Farrier	15,440	610	16,050	94
Breeding Fees	9,820	5,050	14,870	87
Health	17,640	1,440	19,080	112
Training Fees	17,940	6,290	24.230	143
Professional Fees	4,230	920	5,150	30
Hired Labor	36,860	2,310	39,170	230
Capital Improvements	41,810	3,440	45,250	266
Utilities	8,060	170	8,230	48
Rent/Lease	4,380	350	4,730	28
Insurance	8,600	1,130	9,730	57
Taxes	15,620	160	15,780	93
Equine Transportation	6,200	1,250	7,450	44
Human Travel & Lodging	6,660	2,380	9,040	53
Sales & Promotion	3,930	770	4,700	28
Stakes	3,200	2,900	6,100	36
Miscellaneous	5,920	1,380	7,300	43
TOTAL	427,960	62,040	490,000	2,882



Equine owners were asked about the use of their equinerelated acres prior to equine use. Table 11 reflects the results of this question. Forty percent of the acres were in livestock farming prior to equine use. Over 75,000 acres had been in nonagricultural use prior to equine-related use.

#### Value of Equine-Related Assets

The equine owners reported that the total value of their equine-related land, fencing, and facilities was over \$2.9 billion (Table 12). When averaged over the 520,000 equinerelated acres, a value per acre of \$5,635 is obtained.

Equine-related equipment and supplies were valued at \$370 million with an average value per operation of \$8,409 (Table 13). The average value of equipment and supplies per equine was \$2,176.

#### **Equine-Related Expenditures**

Expenditures on equine for 1990 are reported in Table 14 by expense category. A full listing of expenses by category is included in Section IV of the questionnaire (Appendix II). For example, health expenses included veterinarian fees, medicines, parasite control, and lab work. Some of the items under capital improvements were contracted labor and materials for construction, maintenance or repair of buildings, facilities, fences, and swimming facilities. Equine owners were asked to separate their expenditures by those made inside Pennsylvania and those outside Pennsylvania. Nearly \$428 million was spent inside Pennsylvania on the 170,000 equine. An average of \$2,882 per equine was spent in 1990. Feed was the largest expense category with a total of \$79 million or an average of \$465 per equine, Nearly \$51 million was spent on equine purchases in 1990. Approximately \$37 million was spent inside Pennsylvania on hired labor. The equine owners paid \$15.6 million inside

Pennsylvania in taxes during 1990.

#### **Hay Purchases**

As Table 15 indicates, 270,000 tons of hay were purchased for equine in 1990. This is 1.6 tons per equine per year. Table 16 reports these amounts by region. As is expected, the region with the most equine reported the most hay purchases. Southeastern Pennsylvania with its nearly 49,000 equine reported that over 85,000 tons of hay were purchased.

TABLE 15: TONS OF HAY PURCHASED FOR EQUINE **IN CALENDAR YEAR 1990** 

Tons	270,000
Average Per Equine	1.6

TABLE 16: TONS OF HAY PURCHASED FOR EQUINE AND AVERAGE PER EQUINE

District	Tons	Average Per Equine
EQUINE BY DISTRICT, 199	90	
Northwestern.	20,250	1.5
North Central	14,740	1.5
Northeastern	11,180	2.2
West Central	24,970	1.6
Central	28,080	1.5
East Central	22,280	2.1
Southwestern	33,480	1.4
South Central	29,970	1.3
Southeastern	85,050	1.7
TOTAL	270,000	1.6

#### **Equine-Related Employment**

Equine-related employment as of June 1, 1990 was 7,500 jobs (Table 17). Labor services paid in noncash form such as riding lessons or equine training were nearly \$2 million.



TABLE 17: EQUINE-RELATED LABOR, JUNE 1, 1990

Total Number of Paid Workers	
(Pennsylvania Residents Only)	7,500
Value of Non-Cash Services Provided	
to Unpaid Workers	\$ 1,880,000

## TABLE 18: TOTAL EQUINE, AVERAGE VALUE, & TOTAL EXPENDITURES BY COUNTY, 1990

County/	Total	Value Per	Total	Total
District	Equine	Head	Value	Expense
			(000) D. H	(000) Dollars
	2022	Dollars	(000) Dollars	5,264
Crawford	4,700	1,380	6,486 5,436	5,580
Erie	3,600	1,510	5,430	5,560
Forest	<u>1</u> /			4,752
Mercer	3,300	2,390	7,887	
Venango	1,300	2,330	3,029	3,159
Warren	900	1,550	1,395	1,557
NORTHWESTERN, TOTAL	13,800	1,756	24,233	20,312
Bradford	2,200	1,600	3,520	2,376
Cameron	<u>1</u> /		_	
Clinton	1,100	1,750	1,925	1,309
Elk	700	1,860	1,302	1,302
Lycoming	1,900	3,930	7,467	5,472
McKean	900	1,620	1,458	1,665
Potter	900	1,080	972	1,053
Sullivan	1/			Will the second
Tioga	2,100	1,470	3,087	2,541
NORTH CENTRAL, TOTAL	9,800	2,013	19,731	15,718
Lackawanna	1,000	5,000	5,000	2,140
Susquehanna	2,100	1,430	3,003	3,213
	1,200	2,420	2,904	2,064
Wayne	700	3,570	2,499	1,120
Wyoming	5,000	2,681	13,406	8,537
NORTHEASTERN, TOTAL	1,800	1,840	3,312	4,590
Armstrong		2,480	4,960	5,740
Beaver	2,000	3,610	18,411	14,535
Butler	5,100	1,080	1,080	1,270
Clarion	1,000		18,148	12,428
Indiana	2,600	6,980	1,400	1,370
Jefferson	1,000	1,400	4,654	. 3,484
Lawrence	2,600	1,790		43,417
WEST CENTRAL, TOTAL	16,100	3,228	51,965	4,979
Blair	1,300	1,850	2,405	
Cambria	2,100	2,530	5,313	5,460
Centre	3,800	1,870	7,106	6,878
Clearfield	1,300	4,500	5,850	2,366
Columbia	1,400	2,370	3,318	3,556
Dauphin	2,600	2,420	6,292	6,136
Huntingdon	1,000	1,250	1,250	1,180
Juniata	800	2,370	1,896	2,448
Mifflin	800	1,260	1,008	1,016
Montour	600	1,020	612	678
Northumberland	700	1,390	973	1,036
	1,200	2,140	2,568	2,952
Perry	700	1,030	721	707
Snyder	1,000	2,320	2,320	2,070
Union	19,300	2,157	41,632	41,462
CENTRAL, TOTAL		1,440	864	972
Carbon	600	2,570	5,911	7,429
Lehigh	2,300		4,680	5,325
Luzerne	1,500	3,120	3,322	4,268
Monroe	1,100	3,020		6,417
Northampton	2,300	2,760	6,348	3,084
Pike	1,200	1,200	1,440	
Schuylkill	1,800	3,450	6,210	10,710

TABLE 18: TOTAL EQUINE, AVERAGE VALUE, & TOTAL EXPENDITURES BY COUNTY, 1990 (Cont'd)

County/	Total	Value Per	Total	Total
District	Equine	Head	Value	Expense
		Dollars	(000) Dollars	(000) Dollars
EAST CENTRAL, TOTAL	10,800	2,664	28,775	38,205
Allegheny	2,700	2,910	7,857	8,856
Fayette	2,100	2,100	4,410	4,137
Greene	1,700	1,720	2,924	2,465
Somerset	2,500	2,120	5,300	3,850
Washington	9,200	5,180	47,656	39,468
Westmoreland	5,700	3,200	18,240	14,649
SOUTHWESTERN, TOTAL	23,900	3,615	86,387	73,425
Adams	5,500	9,630	52,965	31,845
Bedford	1,500	2,330	3,495	1,635
Cumberland	5,100	7,540	38,454	13,209
Franklin	1,800	2,400	4,320	3,474
Fulton	800	1,000	800	816
York	7,800	2,670	20,826	19,500
SOUTH CENTRAL, TOTAL	22,500	5,372	120,860	70,479
Berks	5,100	3,800	19,380	18,564
Bucks	5,100	5,000	25,500	22,950
Chester	14,600	7,550	110,230	83,950
Delaware	700	4,450	3,115	3,570
Lancaster	17,300	3,020	52,246	33,735
Lebanon	2,200	3,820	8,404	4,884
Montgomery	3,800	3,720	14,136	10,792
Philadelphia.	1/			
SOUTHEASTERN, TOTAL.	48,800	4,775	233,011	178,445
STATE TOTAL	170,000	3,647	620,000	490,000

<sup>1/</sup> Less than 100, included in other counties within the same district.

## Total Equine, Average Value, and Total Expenditures by County

Equine numbers, value, and expenditures are reported for each county in Table 18. Of all counties in Pennsylvania, Lancaster residents reported the most equine. With over 17,000 equine, Lancaster outranks five of the district totals. The large Amish population in Lancaster contributes significantly to this number. Chester County, long known for its equine farms, had the second highest number of equine with 14,600.

Chester was also second in value per head at \$7,550. Adams County was significantly higher than any other counties with an average value per equine of \$9,630. Cumberland was a close third to Chester County with \$7,540. When total value of equine is examined, however, Chester was significantly higher than any other County with over \$110 million. Adams was second with nearly one-half that amount (\$53 million).

Total expenses somewhat followed equine numbers. Lancaster, with the largest number of equine, was third at \$34 million. Chester was the significant leader with \$84 million in expenditures. Washington County, with 9,200 equine, had the second highest amount of expenditures with over \$39 million.

Table 19 divides the total number of equine, equine value, and equine-related expenditures by commercial and non-commercial operations. Non-commercial operations, with 93,500 equine, had a much lower total equine value as was expected. The commercial operations had the higher-valued equine and \$309 million in expenditures.

#### **Equine-Related Income and Gross Income**

Total gross income for the household or operation of the equine owners is reported in Table 20. The distribution of incomes across the nine ranges can be better seen, however, in Figure 5. The \$20,000 to \$49,999 income range is the significant leader in income categories. Over three percent of

## TABLE 19: NUMBER OF EQUINE, TOTAL VALUE, AND TOTAL EQUINE-RELATED EXPENDITURES, BY COMMERCIAL AND NON-COMMERCIAL OPERATIONS, 1990

Operation Type	Total Equine	Total Equine Value	Total Equine Related Expenditures
		(000) Dollars	(000) Dollars
Commercial	76,500	447,000	309,000
Non-Commercial	93,500	173,000	181,000
TOTAL	170,000	620,000	490,000

#### TABLE 20: DOLLAR RANGE OF GROSS INCOME RECEIVED FROM ALL ACTIVITIES, 1990

Dollar Range	Percent
0 - 1.999	1/
2,000 - 4,999	1
5,000 - 19,999	15
20,000 - 49,999	45
50,000 - 99,999	26
100,000 - 249,999	10
250,000 - 499,999	2
500,000 - 999,999	1
1,000,000 - and over	$\nu$
TOTAL	100

1/ Less than 1 percent.

TABLE 21: PERCENT OF GROSS INCOME RECEIVED FROM EQUINE-RELATED ACTIVITIES, 1990 1/

Percent Range	Percent
None	61
1 - 25	24
26 - 50	4
51 - 75	1
76 - 100	10
TOTAL	100

1/ Includes equine-related income outside of Pennsylvania.

TABLE 22: PERCENT OF EQUINE-RELATED INCOME RECEIVED FROM PENNSYLVANIA SOURCES, 1990

Percent Range	Percent
None	4
1 - 25	6
26 - 50	4
51 - 75	3
76 - 100	83
TOTAL	100

## TABLE 23: IMPORTANCE OF EQUINE-RELATED ACTIVITIES TO THE EQUINE OWNER'S OVERALL RECREATION, 1990

Importance 1/	Percent
1 - 2	21
3 - 5	26
6 - 7	53
TOTAL	100

1/ Importance is ranked on a scale of 1 to 7 with 7 being extremely important.

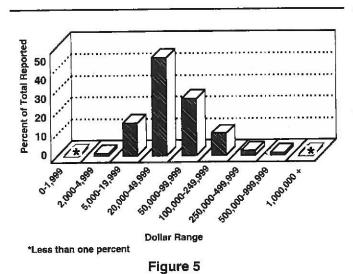
the equine owners reported income over \$250,000. The percent of gross income derived from equine-related activities is shown in Table 21. Well over one-half of equine owners in Pennsylvania received no income from their equine activities. These are likely to be horse owners who consider their activities recreational (see also Table 23). Ten percent of equine owners, however, receive 76 to 100 percent of their income from equine activities.

Table 22 displays the percent of the income received from Pennsylvania sources (income generated inside Pennsylvania). Over 80 percent was generated inside Pennsylvania.

## Time Spent on Equine Recreation and Equine Activities

Over one-half of the equine owners consider their equine activities as extremely important to their overall recreation (Table 23). Twenty-one percent, however, did indicate that equine activities were not very important in their overall recreation. These individuals may well be the same as those that derive a major part of their income from equine activities and thus consider it part of their employment responsibilities rather than recreation.

## RANGE OF GROSS INCOME RECEIVED FROM ALL ACTIVITIES



## AMOUNT OF TIME SPENT WEEKLY ON EQUINE RELATED ACTIVITIES

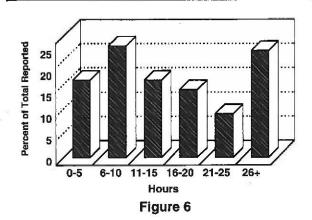


Table 24 presents the average hours per week spent on equine-related recreation. Well over one-half of the owners reported that their equine-related recreation time was less than 6 hours per week. Five percent of the owners spent over 20 hours per week in such recreation.

TABLE 24: AVERAGE HOURS SPENT WEEKLY ON EQUINE-RELATED RECREATION, 1990

Average Hours Per Week	Percent
Less than 6	60
6 - 10	19
11 - 15	10
16 - 20	6
21 – 25	2
More than 25	3
TOTAL	100

The total hours spent weekly on equine-related activities is indicated in Table 25 and is further displayed in Figure 6. Over 20 percent of the owners spend 6 to 10 hours per week with or because of their equine. Yet, another 22 percent spend over 25 hours a week on equine-related activities.

TABLE 25: AVERAGE HOURS SPENT WEEKLY ON EQUINE-RELATED ACTIVITIES, 1990

Average Hours Per Week	Percent
Less than 6	16
6 - 10	23
11 - 15	16
16 - 20	14
21 - 25	9
More than 25	22
TOTAL	100



#### **General Information on Equine Owners**

Sixty percent of the equine owners have at least some college education (Table 26). Sixteen percent have a graduate degree of some type, while 40 percent stopped their formal education with a high school degree or less.

TABLE 26: EDUCATIONAL BACKGROUND OF EQUINE OWNERS, JUNE 1, 1990

Educational Background	Percent
High School Degree or Less	40
Some College	27
College Degree	17
Graduate Degree	16
TOTAL	100

The age of the owners varies as can be seen in Table 27 or Figure 7. The 25- to 60-age group includes over 80 percent of the owners with 37 percent being 25 to 40 years and 45 percent being 41 to 60 years.

## AVERAGE AGE OF EQUINE OWNERS IN PENNSYLVANIA

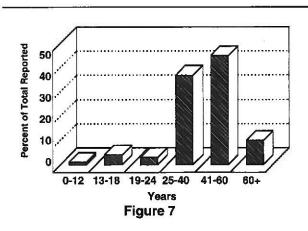


TABLE 27: AGE OF EQUINE OWNERS, JUNE 1, 1990

Age of Equine Owners	Percent
Under 13	1
13 – 18	4
19 – 24	3
25 – 40	37
41 – 60	45
Over 60	10
TOTAL	100

When asked how many years the equine owner had lived in his or her present community, 28 percent reported from 11 to 20 years (Table 28). Sixteen percent had resided in their communities for over 40 years. The less-than-6-year category included 13 percent of the equine owners. Equine owners tend to be long-term members of their communities. Seventy-five percent have lived in their community for over 10 years.

TABLE 28: YEARS EQUINE OWNERS HAVE LIVED IN PRESENT COMMUNITY, JUNE 1, 1990

Years in Present Community	Percent
Less than 6	13
6 - 10	12
11 - 20	28
21 - 40	31
More than 40	16
TOTAL	100

Table 29 reports the number of years that equine owners had been involved in equine-related activities. Nearly 50 percent have been involved over 20 years with over 70 percent of the owners involved over 10 years. Equine are obviously a long-term interest for many.

While Table 29 indicates long-term interest in equine, Table 30 shows that the interest was not necessarily a carryover from the previous generation. Nearly 60 percent of the owners reported the importance of equine activities to the



TABLE 29: NUMBER OF YEARS EQUINE OWNERS HAVE BEEN INVOLVED IN EQUINE-RELATED ACTIVITIES, JUNE 1, 1990

Years Involved in Equine- Related Activities	Percent
Less than 1	<i>y</i>
1 - 2	3
3 - 5	10
6 - 10	14
11 - 20	24
More than 20	49
TOTAL	100

1/ Less than one percent

TABLE 30: IMPORTANCE OF EQUINE-RELATED ACTIVITIES TO THE PREVIOUS GENERATION, JUNE 1, 1990

Importance 1/	Percent
1 - 2	59
3 - 5	21
6 - 7	20
TOTAL	100

1/ Importance is ranked on a scale of 1 to 7 with 7 being extremely important.

TABLE 31: NUMBER OF YEARS EQUINE HAVE BEEN AT PRESENT LOCATION, JUNE 1, 1990

Years at Present Location	Percent		
Less than 1	7		
1 - 2	13		
3-5	22		
6 - 10	20		
11 - 20	22		
More than 20	16		
TOTAL	100		

previous generation as not being important. Twenty percent did report, however, that equine activities were very important to extremely important to their parents.

The equine had been at their present location for a varied number of years (Table 31). Sixteen percent had been there over 20 years, but 20 percent reported two years or less.

#### **Economic and Social Impacts**

As was apparent from the previous numbers, the equine industry was a significant contributor to the Pennsylvania economy. This section further summarizes the economic impact.

The flow of dollars from equine activities is modeled in Figure 8<sup>3</sup>. Dollars that flow from residents of Pennsylvania

<sup>&</sup>lt;sup>3</sup>A form of this model first appeared in *The Economic Impact of the U.S. Horse Industry: Executive Summary*, Prepared for the American Horse Council by Policy Economics Group of Peat, Marwick, Mitchell & Co., January 1987.

## 1990 Pennsylvania Horse Industry Survey Flow of Dollars

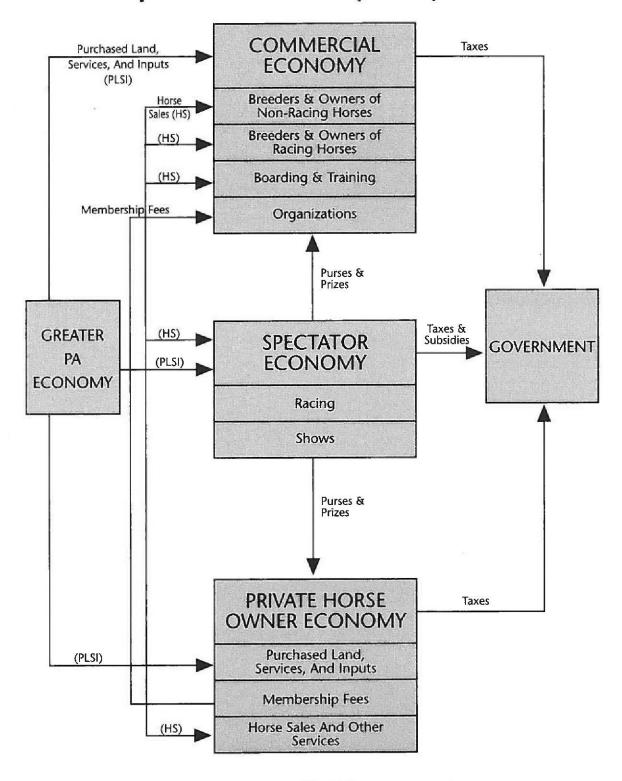


Figure 8

into the equine industry can be broken into three broad categories. The commercial economy includes breeders and owners of both non-racing and racing horses, boarders, trainers, and equine-related organizations. Spectators at both races and shows spend money. The private horse-owner economy includes dollars spent on purchased land, services, and inputs along with membership fees and horse sales or other services. All three subsectors pay monies in local, state, and federal taxes.

The following discussion focuses primarily on the commercial economy and the private horse-owner economy. Figure 8 also models the flow of dollars within the equine sector. Dollars associated with horse sales flow between all three as horses are sold from one sector into another. Membership fees from the private horse economy flow into the organizations that are considered part of the commercial equine economy. Purses and prizes awarded at the hundreds of shows or competitive events also flow between sectors.

Data gathered as part of the equine survey indicate a conservative estimate of the magnitude of the dollar flows. The value of the owned land, fencing, and facilities was found to be over \$2.9 billion. Owners valued their equipment and supply inventory at \$370 million. Annual dollars spent on purchased services and inputs<sup>4</sup> were over \$412 million (total expenditures from Table 14 with taxes subtracted) in 1990. Taxes paid by the equine owners were

over \$15 million. As Table 19 indicates, the commercial sector accounts for 60 percent of the 1990 expenditures.

The equine alone were valued at a total of \$620 million. Table 14 indicates that purchases of equine in 1990 totaled nearly \$35 million. Operations in the commercial sector reported 72 percent of the total equine value (Table 19). As was discussed before, equine-related employment included jobs for 7,500 Pennsylvania residents which includes only on-farm employment. Veterinarians, trainers, farriers, tack and feed sales people, and other equine supporting professionals add many more employment opportunities. Such equine-related professions also generate additional income that was not included in this survey.

Examination of the above figures leaves no doubt that the equine industry is very important to the health of the overall Pennsylvania economy. The industry does its part to provide employment, generate tax dollars, and build assets. Along with its economic contribution, the industry also contributes greatly to the overall quality of life in Pennsylvania as is discussed in the next section.

#### Rural-Urban Linkages

The rapid urbanization of some areas in Pennsylvania is well documented and easy to observe if one drives near Philadelphia, through Lancaster County, or through the



<sup>4</sup>Inventory value and reported purchases of inputs and services can not be added together because some equipment and supplies might be reported in both categories.

outskirts of Pittsburgh. Many other parts of the State are experiencing similar pressures. Such pressures include loss of open space to housing developments and intolerance of agricultural production by urban residents. The equine industry provides an opposing force to land development and increases understanding of agricultural production.

As is clear from the acreage devoted to equine-related use, equine provide significant incentive to keep land in agricultural production (this includes acreage needed to raise feed crops and pasture space). Equine owners also want open spaces for pleasure riding, riding trails, training their animals, and the many other equine activities that require open land. Equine owners currently operate 2,850,000 acres of which 520,000 acres are specifically devoted to equine-related activities. Equine are the most predominant in the highly populated parts of the State. One can conclude that since people want to be close to their equine, a significant amount of the 520,000 acres that are kept open for equine use are in our rapidly urbanizing areas. The equine owners are doing their part to keep land from being developed.

While many equine owners are currently involved in agricultural production, many owners have no background in agriculture. Through the need to purchase hay and other feed, often directly from farmers, these people develop a deeper understanding of agricultural production and of the individuals who are farming. Further contact occurs when equine owners rent pasture space or board their equine on property owned by farmers. Such contact should not be discounted as a powerful educational experience for both sides of the rural/urban perspective.



#### Horse Racing in Pennsylvania

A full description of the important horse racing industry in Pennsylvania is beyond the scope of this report. For full information, one can consult the Annual Report of the State Horse Racing Commission and the State Harness Racing Commission. Previous sections have presented information on the value of the racing breeds in Pennsylvania and of the number of horses used for racing. This section presents some summary information from the horse racing annual reports mentioned above.

Thoroughbred racing occurs at several locations in Pennsylvania. The two main locations are just outside of Philadelphia (Philadelphia Park Race Track) and between Harrisburg and Hershey (Penn National Race Track). Wagers are made at all these tracks and on several off-track sites. At all tracks, a total of 1,785,143 people attended the various races in 1990. The total amount of money wagered was \$335,055,973. Some of this flowed directly into the State's revenue (\$515,684), and the rest was returned to the public or kept as income by the track organizations.

Harness racing is the other important component of the formal racing industry. There are several major harness racing tracks where wagers can be placed. Two of the tracks are Pocono Downs (near Wilkes-Barre) and Ladbroke at the Meadows (near Pittsburgh). In 1990, a total of \$113,750,496 was wagered at the various tracks. Spectators totaled 815,188.



As is obvious from the above numbers, equine racing affected many Pennsylvania residents. The total assets of the tracks are not known, but the capital expenditures are enormous.

#### The Amish

A study of the Pennsylvania equine industry would not be complete without a section on the Amish. As a group, they are the most unique equine owners in the state. Their buggies on Pennsylvania roads are a common sight to most residents and a major attraction for visitors. This section gives a brief background on the Amish as related in the much cited book by John A. Hostetler, Amish Life, 1973, Herald Press, Scottdale, PA.

The Amish are often a misunderstood people. The name comes from Jacob Amman, a swiss man, who lead a group of conservatives in a break away from the Mennonite Church in the late seventeenth century. After considerable religious persecution in Europe, Amish families migrated to the United States in the early 1700's. These colonists first settled in the southeastern Pennsylvania counties of Berks, Chester, and Lancaster. Today 80 percent of the Amish are still in Pennsylvania, Ohio, and Indiana.

They remain a very religious and conservative people with their three main values reported as being to practice a devout religion; to live an agrarian way of life; and to maintain a cohesive family and community. The highest value and ultimate goal in their belief system is eternal life. They believe in the supremacy of the Bible. But unlike many of the protestants, they believe that their life must be separated from the outside world to attain eternal life.

The Amish have an extreme regard for the customs and beliefs of their founders. Thus, they still observe similar manners of worship, styles of dress, and traditions of centuries past. With few exceptions, they continue to plow with horses, travel in buggies, and assemble in private homes for worship.

The horse is prominent in their culture and crucial to their economy. As a result, horsemanship is a prized trait and the children are taught at a young age to respect and understand horses. Most farm implements are horse drawn, which produces a demand for draft horse breeds. The buggies are often pulled by standardbreds. Spirited horses are especially prized by young men of courting age.



As a result, the Amish form a unique component of the equine industry within Pennsylvanian. Even a casual observer of the Amish would have little doubt of the importance of the horse to this group.

#### The Horse as a Therapeutic and Educational Tool

The early Greeks and Romans knew that there was therapeutic value in riding a horse. Thomas Jefferson, as well, recognized the fact that he felt better after riding. In an 1802 letter to a friend, he recommended a regular two-

hour ride to help cure "visceral complaints".

During the early 1900's, many people throughout Europe began to explore the age-old adage "the outside of the horse is good for the inside of the man". In the 1960's, therapeutic horseback riding, or equine-facilitated





therapy, began to be recognized in the United States.

The late Professor James P. Gallagher of The Pennsylvania State University recognized the need for a concentrated effort to help support the burgeoning therapeutic riding industry in Pennsylvania. In the late 70's, the Pennsylvania Council on Horseback

Riding for the Handicapped was established. Now nearly 70 programs throughout Pennsylvania offer horseback riding instruction to over 3,000 riders with various disabilities. Many of these programs are coordinated through their local 4-H extension service, and most are operated as total volunteer (not-for-profit) organizations.

The Pennsylvania Council on Horseback Riding for the Handicapped, in conjunction with the 4-H program at Penn State, is in a position to offer to each county consultation in all phases of riding programs for people with disabilities. The Council is composed of a statewide membership governed by a Board of Directors and is able to draw on the expertise of many individuals directly involved in therapeutic horseback riding.

Therapeutic riding is just one of many equine educational opportunities provided by Penn State. The University's equine programs include a wide range of teaching and extension activities, such as production, management and training courses, seminars, and clinics. Over 6,500 youth are involved in 4-H horse projects which develop life skills and promote knowledge of horsemanship and responsible animal care.

<b>APPENDIX</b>	I: SOURCE I	FOR HORSE	OWNER	NAMES,
<b>ADVISORY</b>	<b>COMMITTE</b>	E, AND MAP	FOR DI	STRICTS

#### **Source For Horse Owner Names**

American Morgan Horse Association, Inc.

American Paint Horse Association

American Quarter Horse Association

American Saddlebred Horse

American Shire Horse Association

American Suffolk Horse Association

American Trakehner Association, Inc.

American Warmblood Society

Appaloosa Horse Club, Inc.

Clydesdale Breeders of the United States

4-H County Lists

Haflinger Registry of North America

International Trotting and Pacing Association, Inc.

New Bolton Center

1988 Horse Clinic List (The Pennsylvania State

University)

1990 Horse Clinic List (The Pennsylvania State University)

North American Trakehner Association

Palomino Horse Breeders of America, Inc.

Paso Fino Horse Association, Inc.

Pennsylvania Arabian Horse Association

Pennsylvania Equine Council Association

Pennsylvania Sire Stakes Fund

Penn State Cooperative Extension

Pinto Horse Association of America, Inc.

Tennessee Walking Horse Breeding and

The Jockey Club

United States Lipizzan Registry

United States Trotting Association

#### **Advisory Committee**

Kathy Brown

Pennsylvania Quarter Horse Association

Murry Brown

Hanover Shoe Farm

Martin Kenny, Pres.

Pennsylvania Equine Council

Kenneth E. Kirchner, Ex. Sect.

State Horse Racing Commission

Don McCahan

Pennsylvania Arabian Horse Association

Mark McDermott

Pennsylvania Horse Breeders Association

Bruce Rappaport, Associate Dean

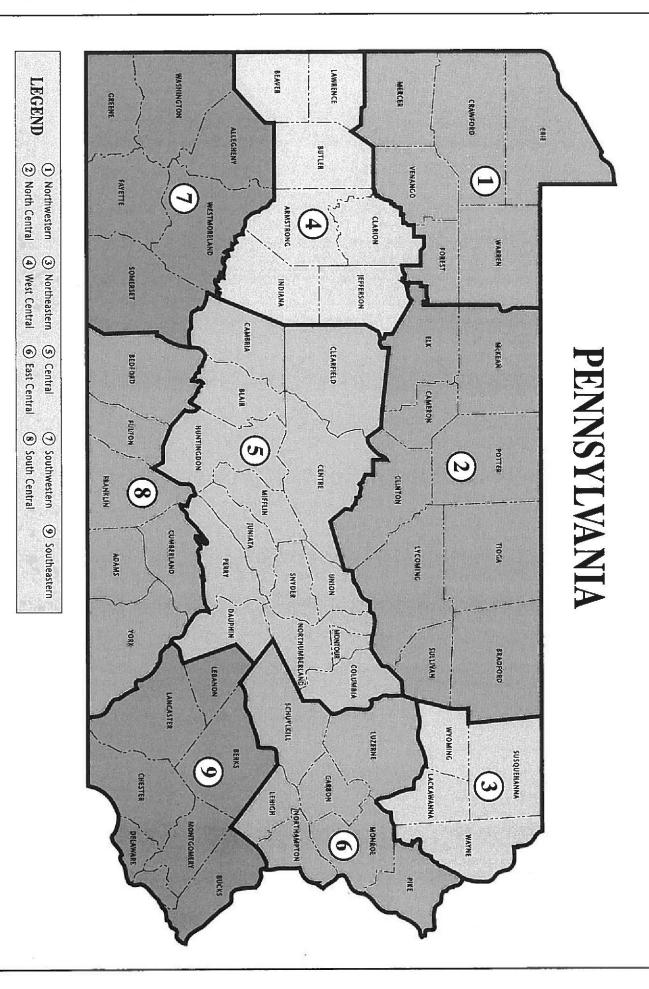
New Bolton Center

Richard E. Sharbaugh, Ex. Sect.

State Harness Racing Commission

Dr. Nelson Wert

Stone Manor Farm



**APPENDIX II: QUESTIONNAIRE** 



Room G-19 2301 N. Cameron Street Harrisburg, Pennsylvania 17110

# PENNSYLVANIA EQUINE SURVEY January 1991

PENNSYLVANIA STATE UNIVERSITY

PENNSYLVANIA DEPARTMENT OF AGRICULTURE

OID 200021

(Please make any corrections to your name and address on the label).

#### Dear Reporter:

Horses, ponies, and mules (referred to hereafter as equine) have long been recognized as part of an industry that is known to be an important contributor to the Pennsylvania economy. However, the extent of the economic impact has not been examined since 1967 when a survey similar to this one was conducted. Results of this survey will be used to provide information upon which to base many improvements, critical to you and others in the equine industry.

Regardless of whether your equine business or equine hobby is comprised of just one animal for recreational use or is a large breeding operation, we need your participation. Individual information will be kept strictly confidential and used only for compiling state and county estimates. Response to this survey is voluntary and not required by law. However, your cooperation is important to further the improvement of the Pennsylvania equine industry. Thank you very much for your participation. (Please return this questionnaire even if you do not have any equine.)

Sincerely,

W. C. Evans State Statistician

W. C. Evans

#### **INSTRUCTIONS**

- 1. Please complete the enclosed questionnaire as soon as possible and return it in the enclosed self-addressed, stamped envelope.
- 2. If you receive more than one questionnaire, please return all questionnaires together to help eliminate duplication.
- 3. Please report all values and expenses to the nearest whole dollar.
- 4. If you do not have exact data for a question, please give your best estimate.
- 5. If you need assistance or have any questions feel free to call Cathy Hamlett at (814) 865-6361 or Neil Gingrich at (814) 364-0469.

#### **SECTION I**

	167			
1.	Did you partially or totally own any equine in Pennsylvania on June 1, 1990?	У	ES	☐ NO
2.	Did you operate an equine boarding or training facility in Pennsylvania during the calendar year 1990?	[] У	ES	□ NO
	If answers to questions 1 and 2 are NO, please sign the back page and return this questionnaire in the enclosed stamped, self-addressed envelope. Otherwise, please continue.	0	199	Office Use
	SECTION II - EQUINE OPERATION CHARACTERISTICS			
1.	Are the day-to-day decisions for your equine made by (please choose only one):			1962
	<ul> <li>1. An individual</li> <li>2. Partners (Partners jointly operate a business and share in decision making)</li> <li>3. A hired manager or trainer</li> <li>4. Other (specify)</li> </ul>	Code	100	Office Use
2.	Which of the following best describes, as of June 1, 1990, where your equine were kept or where your facilities were located? ( <i>Please choose only one.</i> )  1. On Pennsylvania land owned, rented or leased by you  2. In a boarding stable or other arrangement in Pennsylvania (please give the	Code	101	Office Use
3.	name and address			
	How many of these acres in your total operation in Pennsylvania were devoted to the following uses?			Acres Used
	Total Acres	— -		for Equine
	102	י	103	
	1. Cropland 104		105	1
	Pastureland      One of the state of th	7 7	107	
			,	
	108			
	b. How many of these acres do you own? Acres			•
				Office Use
			109	
4.	In what county were the majority of your equine located?	L		
٦.	(Name)		12	

5.			perty in ques one that bes		before its pr	esent equine-	related use?			
	□ 2. □ 3.	Equine fa	farming (exi rm	pp. 30				Code	110	Office Use
	☐ 5.	Do not kn	not used for now how it we decify)	as used	E 180	_				
- 6.	(NOTE:	Commerc		an activity p		mmercial ope he purpose of			119	Office Use
	1.	YES - [Cor	ntinue]	2. N	<b>0</b> - [Go to qu	estion 7.]				
		of the foll kall that a		gories descri	be your com	mercial opera	ation?			
	1.	Breeding	}						11_	Office Use
	□ 4.	Equine to Riding in Racing						Code		
	☐ 6. ☐ 7.	Showing Equine re	or competitental							
	□ 8.	Other (S	pecify)		÷					
7.			, how long h appropriate		ine been at	their present	location?		120	Office Use
					6 - 10 yrs.	11 - 20 yrs.	20 + yrs.	Code		
		1		☐ 3		□ 5	6			
8.			u been invo		ne-related a	ctivities?				Office Use
-			appropriate		5 40		20	Code	121	
	Less tha	an 1 yr. I 1	1 - 2 yrs.	3 - 5 yrs.	6 - 10 yrs.	11 - 20 yrs.	20 + yrs.			
	_	r .s		_		_	_			
9.							eek do you spend	······ Hours	122	
10.							ou consider as	Percent	123	
11.	On a scarelated	ale of 1 to 1 activities i	7 (with 7 bei n your overa	ng extreme Ill recreation	ly important n? (Please ci	), how import rcle approprie	tant are equine ate number)			Office Use
No	t Very In	portant				į	Extremely Import	9869 60	124	
	1	2	3	4	5	6	7	Code	\ <u></u>	

### **SECTION II - EQUINE OPERATION CHARACTERISTICS, Continued**

12.	Check	ine category wit	ich best desc	.noes your e	tuucationai t	Jackyio	ina.		Office Use
	1.	A high school d Some college o	legree or less	s ol				Code	125
	□ 3.	An undergradu A graduate dec	ate college						
13.	What v	vas your age at y	our last birt	hday?				Years	126
14.	How m	any years have y	ou lived in y	our presen	t community	?		Years	127
		ale of 1 to 7 (wit s were equine-re							
Not	Very In	nportant					Extremely Important		Office Use
							on .≥3		128
	1	2	3	4	5	6	7	L	<del> </del>

Please answer for horses you had in Pennsylvania on June 1, 1990. If you had no equine on June 1, 1990 in Pennsylvania, go to Section IV.

These definitions will be helpful in filling out the following chart.

- Estimated Value should reflect the price one would pay for your equine in today's market.
- Racing any equine being kept primarily for the intention of racing for purses. Report foals in their own category.
- Pleasure/Sport- equine used primarily for pleasure riding, trail riding, hunting, pleasure driving, youth programs, and other recreational use.
- Other Competition equine used primarily for showing, eventing, vaulting, barrel racing, rodeo, and other gaming
- **Broodmares** A female that is being kept primarily for breeding.
- Stallions A male that is being kept primarily for breeding.
- Foals of 1990 equine born during calendar year 1990. 7.
- Other equine used for work, teaching, or any retired equine. Ponies any equine under 14.2 hands (58 inches).

EQUINE CATEGORY	Number	Total Estimated Value	ACTIVITIES 1/							
			Racing	Pleasure or Sport	Other comp-	Brood	eding	Foals of	Other	
	1000	(dollars)	100		etition	Mares	Stallions	1990		
1. Arabian	130	131	132	133	134	135	136	137	138	
2. Half Arabian	140	141	142	143	144	145	146	147	148	
3. Anglo-Arab	150	151	152	153	154	155	156	157	158	
4. Am. Saddlebred	160	161	162	163	164	165	166	167	168	
5. Appaloosa	170	171	172	173	174	175	176	177	178	
6. Morgan	180	181	182	183	184	185	186	187	188	
7. Paint	190	191	192	193	194	195	196	197	198	
8. Palomino	200	201	202	203	204	205	206	207	208	
9. Pinto	210	211	212	213	214	215	216	217	218	
10. Quarter Horse	220	221	222	223	224	225	226	227	228	
11. Standardbred	230	231	232	233	234	235	236	237	238	
12. Tenn. Walker	240	241	242	243	244	245	246	247	248	
13. Thoroughbred	250	251	252	253	254	255	256	257	258	
	3	3	3	3	3	3	3	3	3	
Unknown			392	393	394	395	396	397	398	
16. Draft Horses (Specify Breed)	4	4	4	4	4	4	4	4	4	
	4	4	4	4	4	4	4	4	4	
17. Ponies	500	501	502	503	504	505	506	507	508	
	510	511	512	513	514	515	516	517	518	
	5	5	5	5	5	5	5	5	5	
	5	5	5	5	5	5	5	5	5	

The total number of horses in all the activites columns should add up to the total number of horses you own.

### SECTION IV - 1990 EQUINE - RELATED EXPENDITURES

**CALENDAR YEAR 1990** 

		CALENDAR YEAR 1990				
	1990 EXPENDITURES FOR EQUINE RELATED PURPOSES (Please report each expense under one category only)	DOLLARS SPENT (Nearest Dollar)	PERCENT SPENT			
1. F	eed (Both purchased and raised - include grain, hay, seed, fertilizer, eed additives, vitamins, minerals)	600	601			
2. B	edding (Both purchased and raised - include seed, hulls, shells,	602	603			
	ewsprint, straw, other bedding)	604	605			
	rooming supplies (Include clipping equipment, soaps, oils, sprays)	606	607			
	ack (Include clothing, boots, hats, saddles, bridles, halters, harnesses)	608	609			
rr. tr	quipment purchases or maintenance (Include purchases of and paintenance for pickups, autos, campers, airplanes, treadmills, equine vans, painteras, tractors, hot walkers, starting gates, manure spreaders, motor homes, por or table stalls, sulkies, carts, buggies)					
6 R	oarding of Equine (Include stall fees and all expenditures paid to thers for boarding)	610	611			
		612	613			
	quine purchased in calendar year 1990	614	615			
	arrier fees (Include shoeing, trimming etc.)	616	617			
	reeding fees (Include stud fees, mare care fees)	618	619			
	ealth (Include veterinarian fees, medicines, parasite control, lab work)	620	621			
2 P	raining fees (Fees paid for training equine and/or individuals)rofessional fees (Include accounting, legal, etc. also include driver,	622	623			
<i>ј</i> с 3 н	ockey, and rider fees, exclude veterinarian and health)  lired Labor (Include cash wages, employer cost for insurance, ensions, social security contributions, workmans compensation)	624	625			
4. C	apital improvements (Include contracted labor and materials for onstruction, maintenance or repair of buildings, facilities, fences, wimming facilities)	62b	627			
	Itilities (Equine related: telephone, water, gas, oil, electricity)	628	629			
6. R	ent/Lease (Include rental of land and buildings, rental of equine, ental of equipment)	630	631			
	nsurance premiums (Equine-related: liability, mortality, collision)	632	633			
	axes (Include property tax on equine related land and sales/use tax)	634	635			
<b>Q</b> F	quine transportation/hauling (Include trucking, hauling, vanning,	636	637			
0 1	ravel and Lodging (Include air travel, fuel, truck and car expenses,	638	639			
r	neals and any other expenses dealing with human travel)  iales and promotion (Include cost of entertainment, pamphlets,	640	641			
F	promotions, advertisements, commissions, subscriptions, fitting fees)	642	643			
23. J	Stakes and futurity payments  Miscellaneous (Include registration, licenses, entry and membership	644	645			
1	rees)	646	647			